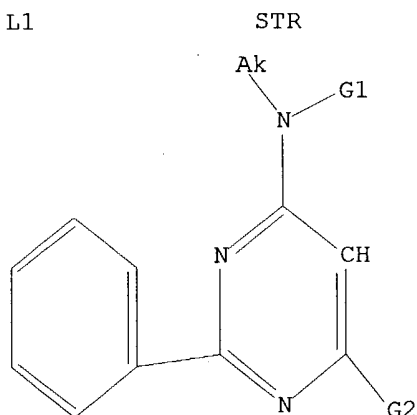


10/122047

L1



G1 H,Ak

G2 Me,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,Ph

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 17:16:07 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 182 TO ITERATE

100.0% PROCESSED 182 ITERATIONS
SEARCH TIME: 00.00.01

17 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 2831 TO 4449
PROJECTED ANSWERS: 93 TO 587

L2 17 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 17:16:12 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 3808 TO ITERATE

100.0% PROCESSED 3808 ITERATIONS
SEARCH TIME: 00.00.01

559 ANSWERS

L3 559 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
155.42	155.90

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 17:16:19 ON 22 APR 2004
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FILE COVERS 1907 - 22 Apr 2004 VOL 140 ISS 17
FILE LAST UPDATED: 21 Apr 2004 (20040421/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 22 L3

=> d 13 1-22 ibib abs hitstr

YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:end

=> d 14 1-22 ibib abs hitstr

L4 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:757432 CAPLUS

DOCUMENT NUMBER: 139:272355

TITLE: 4-aminopyrimidines as antimicrobial agents

INVENTOR(S): Marquais-Bienewald, Sophie; Hoelzl, Werner; Haap, Wolfgang; Preuss, Andrea; Mehlin, Andreas

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

data not good

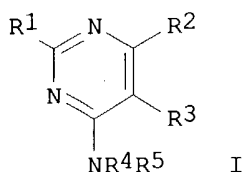
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003077656	A1	20030925	WO 2003-EP2438	20030310
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: EP 2002-405201 A 20020315

OTHER SOURCE(S): MARPAT 139:272355

GI

10/122047



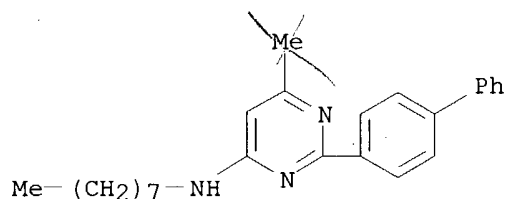
AB 4-Aminopyrimidines I (Markush included) are prepared as antimicrobial agents.

IT 604789-95-9 604789-96-0 604789-98-2
604789-99-3 604790-00-3 604790-01-4
604790-03-6 604790-07-0 604790-08-1
604790-09-2 604790-12-7 604790-13-8
604790-16-1 604790-20-7 604790-21-8
604790-22-9 604790-24-1 604790-27-4
604790-28-5 604790-32-1 604790-33-2
604790-35-4 604790-37-6 604790-38-7
604790-42-3 604790-43-4 604790-44-5
604790-46-7 604790-48-9 604790-49-0
604790-53-6 604790-54-7 604790-57-0
604790-64-9 604790-65-0 604790-67-2
604790-74-1 604790-82-1 604790-84-3
604790-89-8 604790-97-8

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antimicrobial agent)

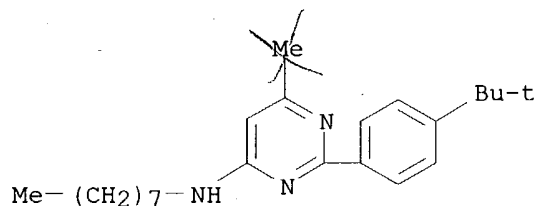
RN 604789-95-9 CAPLUS

CN 4-Pyrimidinamine, 2-[1,1'-biphenyl]-4-yl-6-methyl-N-octyl- (9CI) (CA INDEX NAME)



RN 604789-96-0 CAPLUS

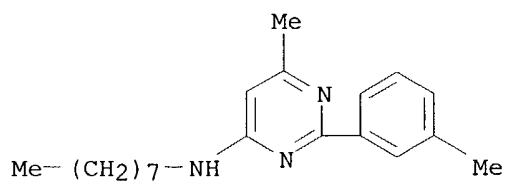
CN 4-Pyrimidinamine, 2-[4-(1,1-dimethylethyl)phenyl]-6-methyl-N-octyl- (9CI) (CA INDEX NAME)



RN 604789-98-2 CAPLUS

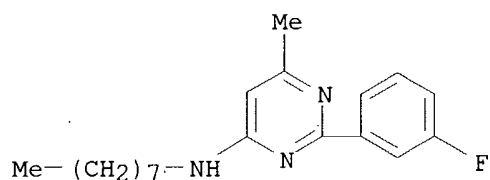
CN 4-Pyrimidinamine, 6-methyl-2-(3-methylphenyl)-N-octyl- (9CI) (CA INDEX NAME)

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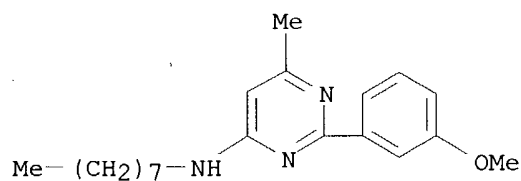
RN 604789-99-3 CAPLUS

CN 4-Pyrimidinamine, 2-(3-fluorophenyl)-6-methyl-N-octyl- (9CI) (CA INDEX NAME)



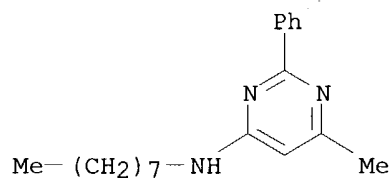
RN 604790-00-3 CAPLUS

CN 4-Pyrimidinamine, 2-(3-methoxyphenyl)-6-methyl-N-octyl- (9CI) (CA INDEX NAME)



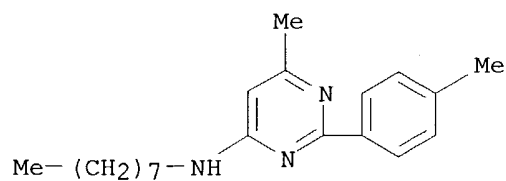
RN 604790-01-4 CAPLUS

CN 4-Pyrimidinamine, 6-methyl-N-octyl-2-phenyl- (9CI) (CA INDEX NAME)



RN 604790-03-6 CAPLUS

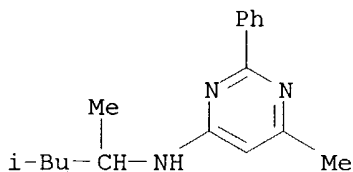
CN 4-Pyrimidinamine, 6-methyl-2-(4-methylphenyl)-N-octyl- (9CI) (CA INDEX NAME)



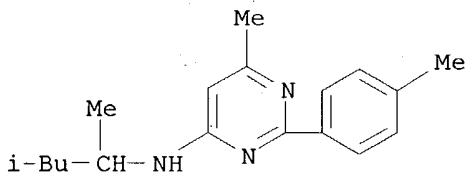
RN 604790-07-0 CAPLUS

10/122047

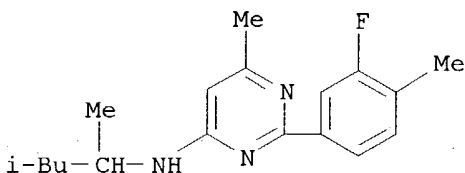
RN 604790-84-3 CAPLUS
CN 4-Pyrimidinamine, N-(1,3-dimethylbutyl)-6-methyl-2-phenyl- (9CI) (CA INDEX NAME)



RN 604790-89-8 CAPLUS
CN 4-Pyrimidinamine, N-(1,3-dimethylbutyl)-6-methyl-2-(4-methylphenyl)- (9CI) (CA INDEX NAME)



RN 604790-97-8 CAPLUS
CN 4-Pyrimidinamine, N-(1,3-dimethylbutyl)-2-(3-fluoro-4-methylphenyl)-6-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:472388 CAPLUS

DOCUMENT NUMBER: 139:53030

TITLE: Pyrimidine-based and quinazoline-based compounds useful as GSK-3 inhibitors

INVENTOR(S): Choquette, Deborah; Davies, Robert J.; Wannamaker, Marion W.

PATENT ASSIGNEE(S): Vertex Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 102 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003049739	A1	20030619	WO 2002-US39190	20021209

Date not good

10/122047

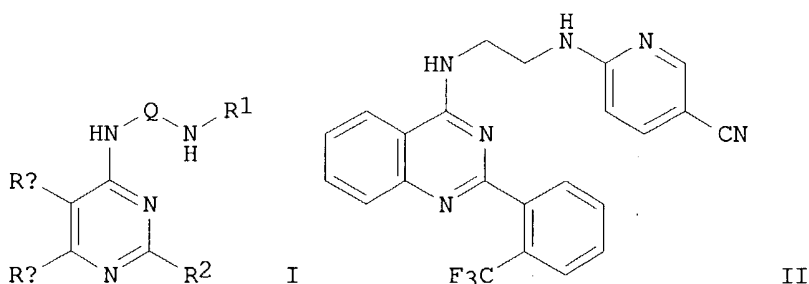
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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG

US 2003199526 A1 20031023 US 2002-314905 20021209

PRIORITY APPLN. INFO.: US 2001-338857P P 20011207

OTHER SOURCE(S): MARPAT 139:53030

GI



AB The invention provides a compound of formula I or a pharmaceutically acceptable derivative thereof [wherein: R₁ = (un)substituted 5- to 6-membered monocyclic or 8- to 10-membered bicyclic (hetero)aryl with 0-4 N/O/S atom(s); Q = (un)substituted C1-4 alkylene chain with 0-2 non-adjacent CH₂ optionally replaced by SO₂ or CO; R₂ = certain (un)substituted Ph, thienyl, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, or 1,2,4-triazinyl; R_a, R_b = -T-R₃; or R_aR_b = atoms to complete fused, partially saturated or aromatic, 5- to 8-membered ring with 0-3 N/O/S atom(s) and

optionally substituted by oxo, -T-R₃, etc.; T = bond or C1-4 alkylene chain; R₃ = H, halo, OH or derivs., NH₂ or derivs., CN, SH or derivs., CHO or derivs., CO₂H or derivs., etc.; including pharmaceutically acceptable derivs. and prodrugs]. The compds. are inhibitors of protein kinases, particularly GSK-3 (glycogen synthase kinase 3) mammalian protein kinases. The invention also provides pharmaceutically acceptable compns. comprising the compds. of the invention, and methods of utilizing the compds. and compns. in the treatment of various protein kinase-mediated disorders, such as diabetes, cancer, stroke, and Alzheimer's disease. A table of over 200 compds. I is given in claims. Preps. of 37 compds. are described in detail. For instance, 4-chloro-2-(2-trifluoromethylphenyl)quinazoline was thermally condensed with 6-(2-aminoethylamino)nicotinonitrile (neat, approx. 140°) to give 49% title compound II. In a test for inhibition of GSK-3β in vitro, 17 compds. I, including II, had K_i < 0.1 μM, and 16 compds. had K_i of 0.1 to 1.0 μM.

IT 544677-84-1P 544678-05-9P 544678-06-0P
544678-07-1P 544678-08-2P 544678-09-3P
544678-10-6P 544678-11-7P 544678-12-8P
544678-13-9P 544678-19-5P 544678-24-2P
544678-25-3P 544678-26-4P 544678-36-6P
544678-49-1P, 6-[2-[6-Phenyl-2-(2-trifluoromethylphenyl)pyrimidin-

10/122047

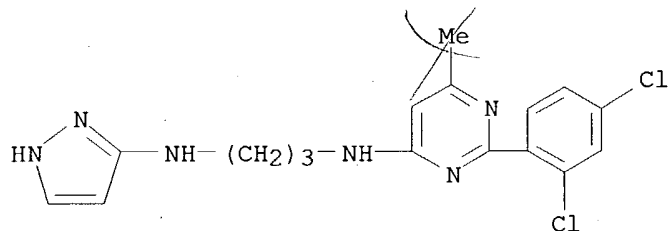
4-ylamino]ethylamino]nicotinonitrile

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of pyrimidine-based compds. useful as GSK-3 inhibitors)

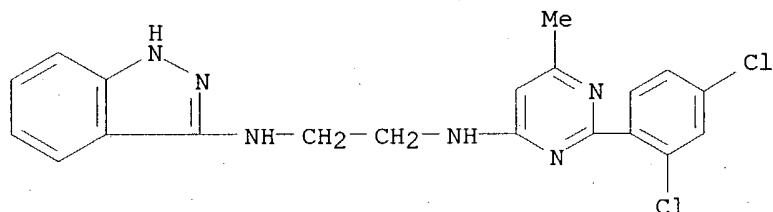
RN 544677-84-1 CAPLUS

CN 1,3-Propanediamine, N-[2-(2,4-dichlorophenyl)-6-methyl-4-pyrimidinyl]-N'-1H-pyrazol-3-yl- (9CI) (CA INDEX NAME)



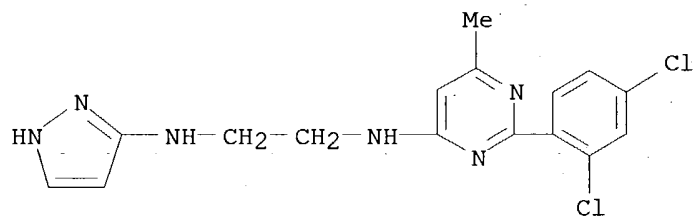
RN 544678-05-9 CAPLUS

CN 1,2-Ethanediamine, N-[2-(2,4-dichlorophenyl)-6-methyl-4-pyrimidinyl]-N'-1H-indazol-3-yl- (9CI) (CA INDEX NAME)



RN 544678-06-0 CAPLUS

CN 1,2-Ethanediamine, N-[2-(2,4-dichlorophenyl)-6-methyl-4-pyrimidinyl]-N'-1H-pyrazol-3-yl- (9CI) (CA INDEX NAME)



RN 544678-07-1 CAPLUS

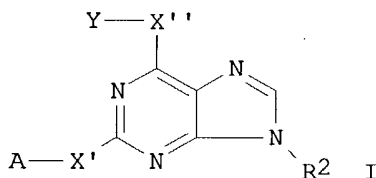
CN 1,2-Ethanediamine, N-[2-(2,4-dichlorophenyl)-6-methyl-4-pyrimidinyl]-N'-1H-indol-2-yl- (9CI) (CA INDEX NAME)

10/122047

WER 3 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:301049 CAPLUS
DOCUMENT NUMBER: 138:321058
TITLE: C2-, C6- and 9-Aryl-substituted purine and other
heteroaryl kinase inhibitor scaffolds and methods for
their preparation
INVENTOR(S): Ding, Sheng; Ding, Qiang; Gray, Nathanael S.
PATENT ASSIGNEE(S): IRM LLC, Bermuda
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003031406	A2	20030417	WO 2002-US32680	20021012
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003191312	A1	20031009	US 2002-270030	20021012
PRIORITY APPLN. INFO.: US 2001-328763P P 20011012 US 2001-331835P P 20011120 US 2002-346480P P 20020107 US 2002-348089P P 20020110				
OTHER SOURCE(S): CASREACT 138:321058; MARPAT 138:321058 GI				

*Not
in good*



AB General methods for the solution phase as well as solid phase synthesis of various substituted heteroaryls, particularly C2-, C6- and 9-aryl-substituted purines (e.g. 2-(2,4-dimethoxyphenyl)-6-(4-methoxybenzylamino)-9-isopropylpurine), was demonstrated. These substituted heteroaryls can be further elaborated by aromatic substitution with amines at elevated temperature or by anilines, boronic acids and phenols via Pd catalyzed cross-coupling reactions. The 1st claim comprises a method of preparing a C2-substituted purine compound, said method comprising: reacting a C2-halogenated purine with A-X (X = -B(OH)2, -OH, and -NHR1; R1 = H, (un)substituted alkyl; A = (un)substituted alkyl, (un)substituted aryl, (un)substituted heterocyclyl) in the presence of a solvent, a base, a carbene ligand and a Pd catalyst. The 2nd claims narrows the 1st claim to purines I wherein R2 = H, (un)substituted alkyl, (un)substituted aryl,

(un)substituted heterocyclyl; X' = direct bond, NR1 and O; X'' = direct bond, O and NR3, with the proviso that when X'' is NR3, Y is R4 or A', and when X' is O or a direct bond, Y is A'; A' = (un)substituted alkyl, (un)substituted aryl, (un)substituted arylalkyl, (un)substituted heterocyclyl; R3 = H, (un)substituted alkyl; and R4 = (un)substituted alkyl. Similar claims pertain to C6-substituted purines. Also claimed is a method of preparing a 9-aryl substituted purines, the method comprising: reacting a 2,6-dihalogenated purine with Ar-B(OH)2 (Ar = (un)substituted aryl, and (un)substituted heterocyclyl) in the presence of a solvent and a Cu catalyst. Also claimed is a method for synthesizing a substituted heteroaryl, the method comprising: providing a dihaloheteroaryl scaffold moiety and capturing the dihaloheteroaryl scaffold moiety on a resin by nucleophilic substitution of a 1st halogen by a resin-bound amine nucleophile to afford a resin-bound amine substituted monohaloheteroaryl. Substitution of the 2nd halogen is done by nucleophilic displacement (e.g. by aniline, phenol, amine, boronic acid) or coupling (e.g. palladium-mediated). An initial substitution (e.g. alkylation, acylation, coupling) can be done prior to substitution of the 1st halogen. Example procedures are included for: boronic acid coupling, aniline coupling, phenol coupling, purine N9 arylation via boronic acids/cupric acetate, reductive amination for synthesis of PAL-resin-bound amine, resin capture of dichloroheterocycles, substitution of remaining chloro group with boronic acids via Suzuki coupling and product cleavage, substitution of remaining chloro group with anilines or amines via palladium-catalyzed reaction and product cleavage, substitution of remaining chloro group with phenols via palladium-catalyzed reaction and product cleavage, substitution of remaining chloro group with amines via non-palladium-catalyzed amination reaction without base and product cleavage, and substitution of remaining chloro group with amines via non-palladium-catalyzed amination reaction with KOTBu as base and product cleavage. Tables of purity and yields for various heteroaryl combinatorial libraries are included as validation of the following methods: palladium catalyzed cross-coupling reactions for derivatizing resin-bound 2-chloro-6-aminopurine with boronic acids, anilines, amines and phenols, resin-bound chloroheterocyclic scaffolds which can be derivatized via Suzuki coupling reaction, resin-bound chloroheterocyclic scaffolds which can be derivatized via palladium catalyzed amination reaction, and resin-bound chloroheterocyclic scaffolds which can be derivatized via palladium catalyzed C-O bond formation reaction.

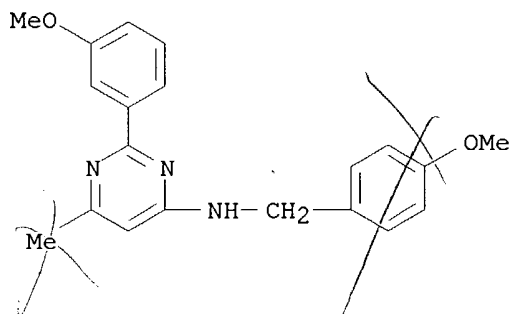
IT **406932-43-2P**, 4-(4-Methoxybenzylamino)-2-(3-methoxyphenyl)-6-methylpyrimidine

RL: CPN (Combinatorial preparation); CMBI (Combinatorial study); PREP (Preparation)

(C2-, C6- and 9-Aryl-substituted purine and other heteroaryl kinase inhibitor scaffolds and methods for their preparation)

RN 406932-43-2 CAPLUS

CN 4-Pyrimidinamine, 2-(3-methoxyphenyl)-N-[(4-methoxyphenyl)methyl]-6-methyl-
(9CI) (CA INDEX NAME)



10/122047

NSWER 4 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:261678 CAPLUS
DOCUMENT NUMBER: 138:287691
TITLE: Preparation of 4-aminopyrimidine derivatives as
insulin secretion accelerators
INVENTOR(S): Yonetoku, Yasuhiro; Maruyama, Tatsuya; Negoro, Kenji;
Moritomo, Hiroyuki; Imanishi, Naoki; Shimada, Itsuro;
Moritomo, Ayako; Hamaguchi, Wataru; Misawa, Hana;
Yoshida, Shigeru; Ohishi, Takahide
PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

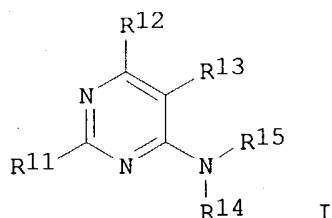
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003026661	A1	20030403	WO 2002-JP9350	20020912
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: JP 2001-279671 A 20010914

JP 2002-121012 A 20020423

OTHER SOURCE(S): MARPAT 138:287691

GI



not good

AB Disclosed are insulin secretion accelerators containing the 4-aminopyrimidine derivs. [I; R11 = A11-D11 (wherein A11 = single bond, lower alkylene, lower alkenylene; D11 = each (un)substituted aryl, cycloalkyl, or aromatic or non-aromatic heterocyclyl); R12 = H, lower alkyl optionally substituted by ≥ 1 groups selected from aryl, halo, lower alkoxy, and OH; R13 = H, Me, F; R14 = H, lower alkyl optionally substituted by ≥ 1 halogens; R15 = A15-D15 (wherein A15 = single bond, lower alkylene, lower alkenylene; D15 = H, lower alkoxy, amino optionally substituted by 1 or 2 groups selected from lower alkyl and aryl, each (un)substituted aryl, cycloalkyl, or aromatic or non-aromatic heterocyclyl)] or pharmaceutically acceptable salts thereof as the active ingredients. These compds. are highly effective in promoting insulin secretion, increasing insulin

content, and inhibiting blood sugar level from increasing and are usable for treatments for insulin-dependent diabetes, non-insulin-dependent diabetes, insulin-resistant diseases, and obesity. Thus, a mixture of 284 mg 2-(4-bromophenyl)-4-chloro-6-methylpyrimidine, 1 mL 70% aqueous ethylamine solution, 2 mL MeOH was stirred at room temperature for 2 h and at 60° for 3 h, treated again with 1 mL 70% aqueous ethylamine solution, and stirred at 60° for 5 h to give 198 mg N-[2-(4-bromophenyl)-6-methylpyrimidin-4-yl]ethylamine (II). II in vitro promoted the secretion of insulin in mouse spleen β -cells by 159% vs. 122% for Glibenclamide.

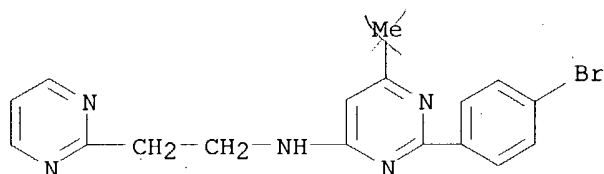
IT 504404-67-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(N-methylation by Me iodide; preparation of 4-aminopyrimidine derivs. as insulin secretion accelerators for treating diabetes, insulin-resistant diseases, and obesity)

RN 504404-67-5 CAPLUS

CN 2-Pyrimidineethanamine, N-[2-(4-bromophenyl)-6-methyl-4-pyrimidinyl]- (9CI) (CA INDEX NAME)



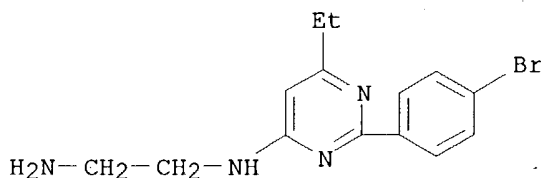
IT 504401-51-8, N-[2-(4-Bromophenyl)-6-ethylpyrimidin-4-yl]ethane-1,2-diamine

RL: RCT (Reactant); RACT (Reactant or reagent)

(amidation with methanesulfonyl chloride; preparation of 4-aminopyrimidine derivs. as insulin secretion accelerators for treating diabetes, insulin-resistant diseases, and obesity)

RN 504401-51-8 CAPLUS

CN 1,2-Ethanediamine, N-[2-(4-bromophenyl)-6-ethyl-4-pyrimidinyl]- (9CI) (CA INDEX NAME)



IT 504399-69-3P 504399-70-6P 504399-72-8P
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 504399-94-4P 504399-95-5P 504399-96-6P
 504399-97-7P 504399-98-8P 504399-99-9P
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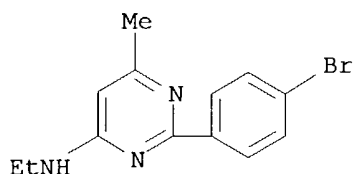
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 504403-55-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(preparation of 4-aminopyrimidine derivs. as insulin secretion accelerators
 for treating diabetes, insulin-resistant diseases, and obesity)

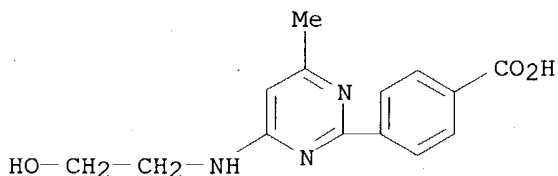
RN 504399-69-3 CAPLUS

CN 4-Pyrimidinamine, 2-(4-bromophenyl)-N-ethyl-6-methyl- (9CI) (CA INDEX
 NAME)



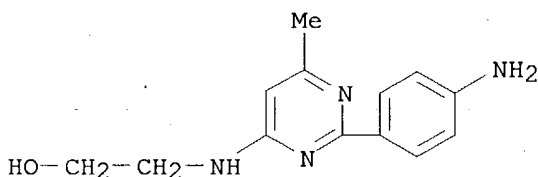
RN 504399-70-6 CAPLUS

CN Benzoic acid, 4-[4-[(2-hydroxyethyl)amino]-6-methyl-2-pyrimidinyl]- (9CI)
 (CA INDEX NAME)



RN 504399-72-8 CAPLUS

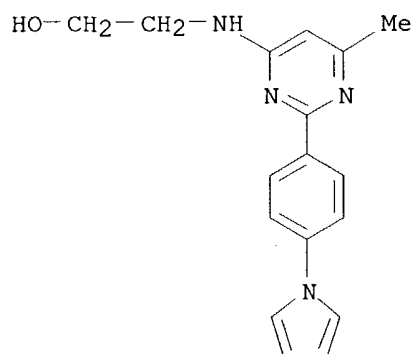
CN Ethanol, 2-[[2-(4-aminophenyl)-6-methyl-4-pyrimidinyl]amino]- (9CI) (CA
 INDEX NAME)



RN 504399-73-9 CAPLUS

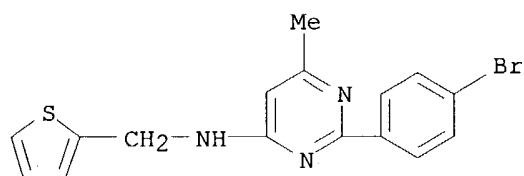
CN Ethanol, 2-[[6-methyl-2-[4-(1H-pyrrol-1-yl)phenyl]-4-pyrimidinyl]amino]-
 (9CI) (CA INDEX NAME)

10/122047



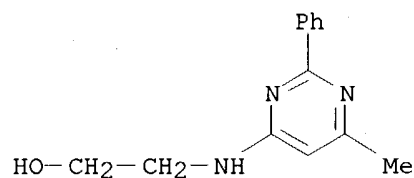
RN 504399-78-4 CAPLUS

CN 4-Pyrimidinamine, 2-(4-bromophenyl)-6-methyl-N-(2-thienylmethyl)- (9CI)
(CA INDEX NAME)



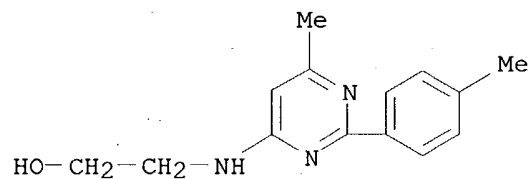
RN 504399-93-3 CAPLUS

CN Ethanol, 2-[(6-methyl-2-phenyl-4-pyrimidinyl)amino]- (9CI) (CA INDEX
NAME)



RN 504399-94-4 CAPLUS

CN Ethanol, 2-[[6-methyl-2-(4-methylphenyl)-4-pyrimidinyl]amino]- (9CI) (CA
INDEX NAME)

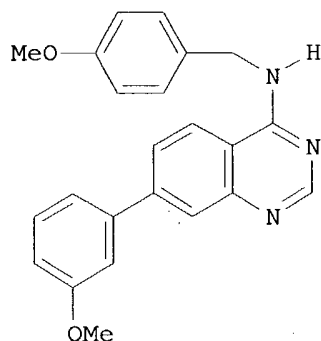


RN 504399-95-5 CAPLUS

CN Ethanol, 2-[[2-(4-ethylphenyl)-6-methyl-4-pyrimidinyl]amino]- (9CI) (CA
INDEX NAME)

10/122047

NSWER 5 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:96165 CAPLUS
DOCUMENT NUMBER: 136:294745
TITLE: A Combinatorial Scaffold Approach toward
Kinase-Directed Heterocycle Libraries
AUTHOR(S): Ding, Sheng; Gray, Nathanael S.; Wu, Xu; Ding, Qiang;
Schultz, Peter G.
CORPORATE SOURCE: Department of Chemistry and the Skaggs Institute for
Chemical Biology, The Scripps Research Institute, La
Jolla, CA, 92037, USA
SOURCE: Journal of the American Chemical Society (2002),
124(8), 1594-1596
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:294745
GI



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good*

AB A novel strategy for efficient synthesis of various substituted nitrogen-heterocycles, e.g., I, as kinase-directed combinatorial libraries is described. The general scheme involves capture of various dichloroheterocycles onto solid support and further elaborations by aromatic substitution with amines at elevated temperature or by anilines, boronic acids, and phenols via palladium-catalyzed cross-coupling reactions, thus the scaffold itself is transformed into a diversity element within the combinatorial scheme. Libraries consisting of discrete and highly diverse heterocyclic small mols. constructed with these chemistries are currently being evaluated in a variety of cell and protein-based assays.

IT **406932-43-2P**

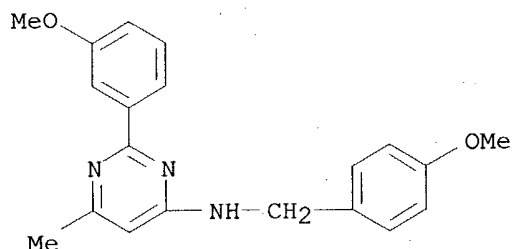
RL: CPN (Combinatorial preparation); CMBI (Combinatorial study); PREP (Preparation)

(derivatization of resin bound chloroheterocyclic scaffolds via Suzuki coupling reaction with aryl boronic acid and subsequent cleavage of substituted heterocyclic product)

RN 406932-43-2 CAPLUS

CN 4-Pyrimidinamine, 2-(3-methoxyphenyl)-N-[(4-methoxyphenyl)methyl]-6-methyl-
(9CI) (CA INDEX NAME)

10/122047



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:380560 CAPLUS

DOCUMENT NUMBER: 135:5621

TITLE: Preparation of [5-chloro-6-phenyl-2-(4-trifluoromethylphenyl)-4-pyrimidinylamino]acetamide derivatives as antirheumatic agents, process for producing the same, medicinal compositions containing the same and intermediate of these compounds

INVENTOR(S): Murata, Teruya; Ohno, Kazunori; Tanaka, Masayasu; Itoh, Mari

PATENT ASSIGNEE(S): Dainippon Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

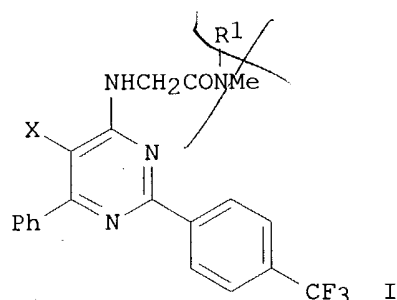
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

date not good

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001036392	A1	20010525	WO 2000-JP7854	20001109
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 2001013024	A5	20010530	AU 2001-13024	20001109
EP 1236721	A1	20020904	EP 2000-974834	20001109
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
US 6620817	B1	20030916	US 2002-130151	20020513
PRIORITY APPLN. INFO.:			JP 1999-326290	A 19991117
			WO 2000-JP7854	W 20001109

GI



AB [5-Chloro-6-phenyl-2-(4-trifluoromethylphenyl)-4-pyrimidinylamino]acetamide derivs. represented by general formula (I; R1 = Me, cyclopropyl; X = Cl) are prepared by chlorination of I (R1 = same as above; X = H). Because of having a potent antirheumatic effect and a low toxicity, these compds. are useful as remedies and preventives for rheumatic diseases such as rheumatism, Behcet's disease and ankylosing spondylitis, and inflammatory immunol. diseases such as multiple sclerosis, systemic lupus erythematosus and inflammatory autoimmunol. diseases such as Sjogren's syndrome. Thus, a mixture of 15.9 g I (R1 = Me, X = H) (preparation given), 6.4 g N-chlorosuccinimide, and 80 mL AcOH was stirred at 90° for 1.5 h to give 16 g I (R1 = Me, X = Cl) (II). II and I (R1 = cyclopropyl, X = Cl) (III) inhibited at 10 mg/kg per day for 5 days inhibited the collagen-induced arthritis in mice by 96.0 and 96.6%, resp. A tablet containing II and capsule and dispersant containing III were formulated.

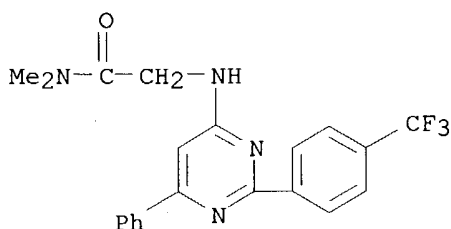
IT **340011-61-2P 340011-65-6P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of [chlorophenyl(fluoromethylphenyl)pyrimidinylamino]acetamide derivs. as antirheumatic agents)

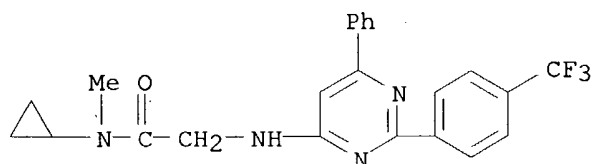
RN 340011-61-2 CAPLUS

CN Acetamide, N,N-dimethyl-2-[[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



RN 340011-65-6 CAPLUS

CN Acetamide, N-cyclopropyl-N-methyl-2-[[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



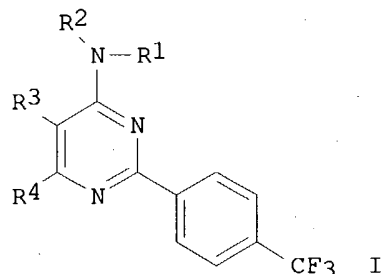
10/122047

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:372157 CAPLUS
DOCUMENT NUMBER: 134:366894
TITLE: Preparation of 2-(4-trifluoromethylphenyl)-4-aminopyrimidines as remedies for autoimmune inflammatory diseases
INVENTOR(S): Murata, Akiya; Kondo, Masanori; Ohno, Kazunori; Tanaka, Masayasu; Ito, Masato
PATENT ASSIGNEE(S): Dainippon Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001139560	A2	20010522	JP 1999-326299	19991117
PRIORITY APPLN. INFO.:			JP 1999-326299	19991117
OTHER SOURCE(S):		MARPAT 134:366894		

GI



data not good

AB The title compds. I [R1 = H, alkyl, etc.; R2 = alkyl, etc.; further detail on R1 and R2 is given; R3 = halo, etc.; R4 = alkyl, (un)substituted Ph, etc.] are prepared I [NR1R2 = NHCH2CH(OH)Me; R3 = Cl; R4 = phenyl] at 3 mg/kg/day orally (5 days/wk; for 7.4 wk) gave 98.2 % inhibition of collagen-induced arthritis in mice. Formulations are given.

IT **340149-71-5P 340149-73-7P 340149-75-9P**
340149-77-1P 340149-79-3P 340149-81-7P
340149-89-5P 340149-91-9P 340149-93-1P

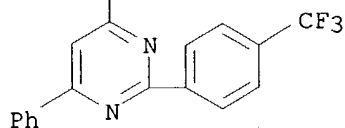
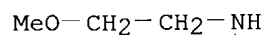
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aminopyrimidines as remedies for autoimmune inflammatory diseases)

RN 340149-71-5 CAPLUS

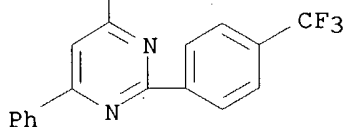
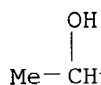
CN 4-Pyrimidinamine, N-(2-methoxyethyl)-6-phenyl-2-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

10/122047



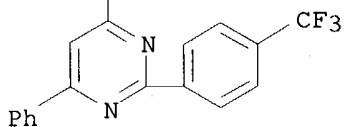
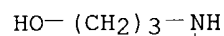
RN 340149-73-7 CAPLUS

CN 2-Propanol, 1-[[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



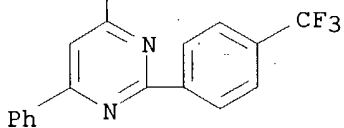
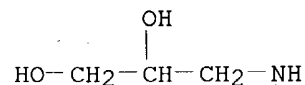
RN 340149-75-9 CAPLUS

CN 1-Propanol, 3-[[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



RN 340149-77-1 CAPLUS

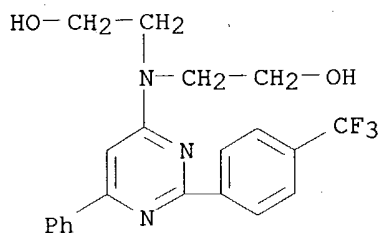
CN 1,2-Propanediol, 3-[[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



RN 340149-79-3 CAPLUS

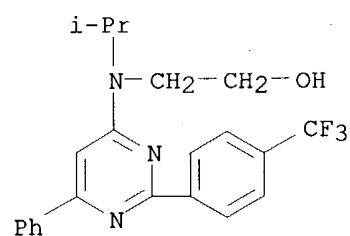
CN Ethanol, 2,2'-[[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]imino]bis- (9CI) (CA INDEX NAME)

10/122047



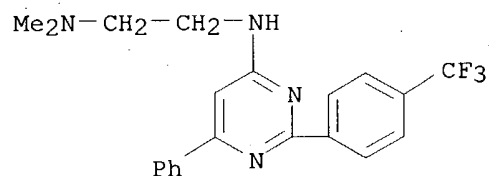
RN 340149-81-7 CAPLUS

CN Ethanol, 2-[(1-methylethyl)[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



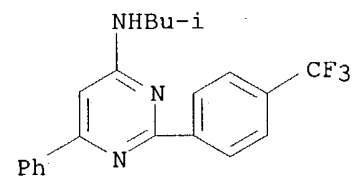
RN 340149-89-5 CAPLUS

CN 1,2-Ethanediamine, N,N-dimethyl-N'-[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]- (9CI) (CA INDEX NAME)



RN 340149-91-9 CAPLUS

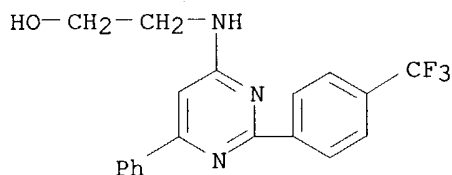
CN 4-Pyrimidinamine, N-(2-methylpropyl)-6-phenyl-2-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 340149-93-1 CAPLUS

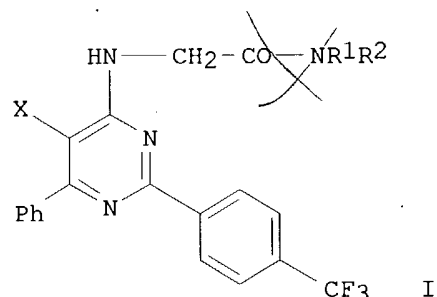
CN Ethanol, 2-[[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)

10/122047



L4 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:369711 CAPLUS
DOCUMENT NUMBER: 134:366892
TITLE: Preparation of 5-halogeno-6-phenyl-2-(4-trifluoromethylphenyl)-4-pyrimidinylamino]acetamides and compositions for treatment of immune inflammation
INVENTOR(S): Murata, Akiya; Ohno, Kazunori; Tanaka, Masayasu; Ito, Mari
PATENT ASSIGNEE(S): Dainippon Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001139559	A2	20010522	JP 1999-326295	19991117
PRIORITY APPLN. INFO.:			JP 1999-326295	19991117
OTHER SOURCE(S):	MARPAT 134:366892			
GI				



Date not good

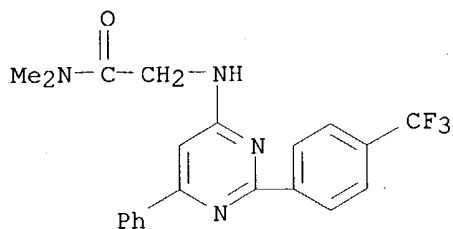
AB Title compds. I [R₁ = Me, Et; R₂ = Me, Et, iso-Pr, cyclopropyl; X = Cl, Br; (R₁, R₂, X) ≠ (Me, Me, Cl), (Me, cyclopropyl, Cl)], useful for treatment of rheumatoid arthritis, Behcet's disease, myelitis, multiple sclerosis, systemic lupus erythematosus, Sjogren's syndrome, are prepared
N,N-dimethyl-2-[6-phenyl-2-(4-trifluoromethylphenyl)-4-pyrimidinylamino]acetamide (1.1 g) was reacted with N-bromosuccinimide in AcOH at 90° for 1 h to give 1 g 2-[5-bromo-6-phenyl-2-(4-trifluoromethylphenyl)-4-pyrimidinylamino]-N,N-dimethylacetamide showing 96.0% inhibitory activity against arthritis in mouse.
IT 340011-61-2P 340011-62-3P 340011-63-4P
340011-64-5P 340011-65-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of halophenyl(trifluoromethylphenyl)pyrimidinylamino]acetamides

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and compns. for treatment of immune inflammation)

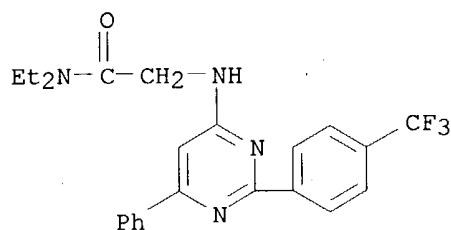
RN 340011-61-2 CAPLUS

CN Acetamide, N,N-dimethyl-2-[[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



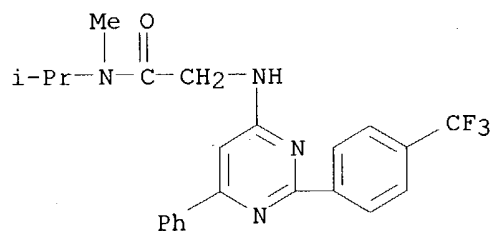
RN 340011-62-3 CAPLUS

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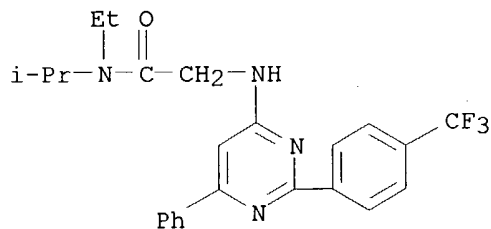
RN 340011-63-4 CAPLUS

CN Acetamide, N-methyl-N-(1-methylethyl)-2-[[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



RN 340011-64-5 CAPLUS

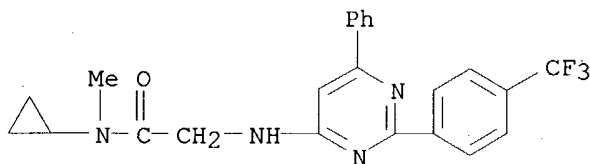
CN Acetamide, N-ethyl-N-(1-methylethyl)-2-[[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



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RN 340011-65-6 CAPLUS

CN Acetamide, N-cyclopropyl-N-methyl-2-[[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



L4 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:366094 CAPLUS

DOCUMENT NUMBER: 134:366890

TITLE: Preparation of [2-(4-trifluoromethylphenyl)-4-pyrimidinylamino]acetamides for treatment of immune inflammation

INVENTOR(S): Murata, Akiya; Kondo, Masanori; Ohno, Kazunori; Tanaka, Masayasu; Ito, Mari

PATENT ASSIGNEE(S): Dainippon Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

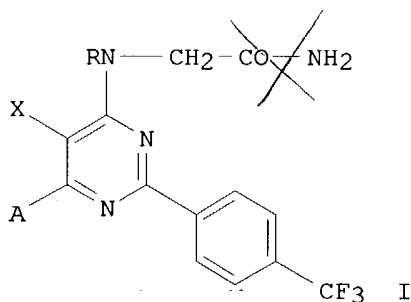
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001139558	A2	20010522	JP 1999-324719	19991115
PRIORITY APPLN. INFO.:			JP 1999-324719	19991115
OTHER SOURCE(S):		MARPAT 134:366890		

GI



date not good

AB Title compds. I (A = H, lower alkyl, cycloalkyl, F3C, halo, etc.; X = H, halo, lower alkyl, HOCH2, lower alkoxyethyl, NO2, etc.; R = H, lower alkyl), useful for treatment of rheumatoid arthritis, Behcet's disease, myelitis, multiple sclerosis, systemic lupus erythematosus, Sjogren's syndrome, are prepared Et 2-[5,6-dimethyl-2-(4-trifluoromethylphenyl)-4-pyrimidinylamino]acetate (1.1 g) was treated with aqueous NH3 in at room temperature

for 48 h to give 0.8 g 2-[5,6-dimethyl-2-(4-trifluoromethylphenyl)-4-pyrimidinylamino]acetamide showing 100% inhibitory activity against arthritis in mouse.

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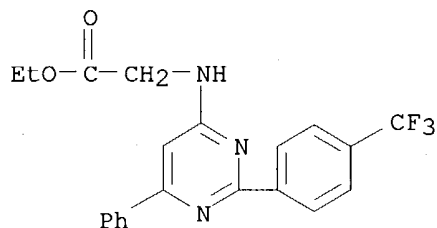
IT 340008-57-3P 340008-59-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of [(trifluoromethyl)phenyl]pyrimidinylamino]acetamides for treatment of immune inflammation)

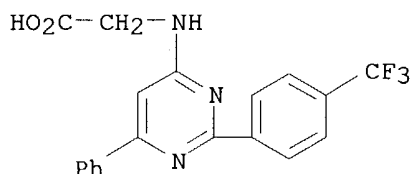
RN 340008-57-3 CAPLUS

CN Glycine, N-[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 340008-59-5 CAPLUS

CN Glycine, N-[6-phenyl-2-[4-(trifluoromethyl)phenyl]-4-pyrimidinyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:115763 CAPLUS

DOCUMENT NUMBER: 132:151833

TITLE: Preparation of 4-amino-2-arylpyrimidines as modulators of cyclic guanosine monophosphate production.

INVENTOR(S): Schindler, Ursula; Schoenafinger, Karl; Strobel, Hartmut

PATENT ASSIGNEE(S): Hoechst Marion Roussel Deutschland G.m.b.H., Germany

SOURCE: Ger. Offen., 22 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

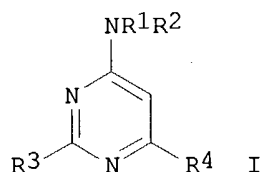
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19836697	A1	20000217	DE 1998-19836697	19980813
CA 2340405	AA	20000224	CA 1999-2340405	19990804
WO 2000009496	A1	20000224	WO 1999-EP5636	19990804

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG,

present case

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KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU 9957307 A1 20000306 AU 1999-57307 19990804
AU 760988 B2 20030529
BR 9913003 A 20010508 BR 1999-13003 19990804
EP 1112266 A1 20010704 EP 1999-944330 19990804
EP 1112266 B1 20030514
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IE, FI
JP 2002522536 T2 20020723 JP 2000-564948 19990804
AT 240315 E 20030515 AT 1999-944330 19990804
PT 1112266 T 20030930 PT 1999-944330 19990804
PRIORITY APPLN. INFO.: DE 1998-19836697 A 19980813
WO 1999-EP5636 W 19990804
OTHER SOURCE(S): MARPAT 132:151833
GI

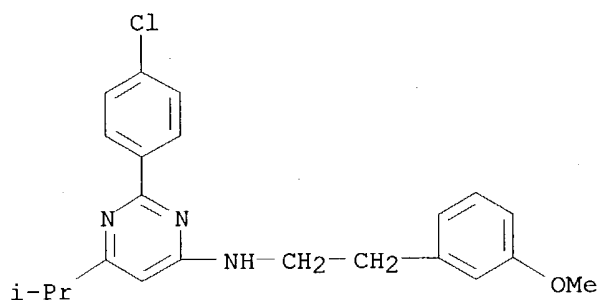


AB Title compds. [I; R¹ = (substituted) alkyl, cycloalkyl, 5-7 membered heterocyclyl; R² = H, (substituted) alkyl, cycloalkyl, 5-7 membered heterocyclyl; R¹R²N = (substituted) 5-7 membered heterocyclyl; R³ = aryl; R⁴ = alkyl, CF₃, aryl], were prepared Thus, 4-chloro-2(4-chlorophenyl)-6-isopropylpyrimidine (preparation given) and 4-amino-2,2,6,6,-tetramethylpiperidine were stirred at 150° for 2 h to give 2-(4-chlorophenyl)-6-isopropyl-4-[(2,2,6,6-tetramethylpiperidin-4-yl)amino]pyrimidine dihydrochloride. Tested I at 50 µM stimulated guanylate cyclase by >4 to 28-fold.

IT 257948-67-7P 257948-68-8P 257948-69-9P
257948-70-2P 257948-71-3P 257948-73-5P
257948-74-6P 257948-75-7P 257948-76-8P
257948-83-7P 257948-84-8P 257948-90-6P
257948-91-7P 257948-92-8P 257948-96-2P
257948-97-3P 257949-01-2P 257949-08-9P
257949-09-0P 257949-13-6P 257949-14-7P
257949-23-8P 257949-30-7P 257949-31-8P
257949-32-9P 257949-35-2P 257949-36-3P
257949-45-4P 257949-65-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 4-amino-2-arylpyrimidines as modulators of cyclic guanosine monophosphate production)

RN 257948-67-7 CAPLUS
CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-N-[2-(3-methoxyphenyl)ethyl]-6-(1-methylethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

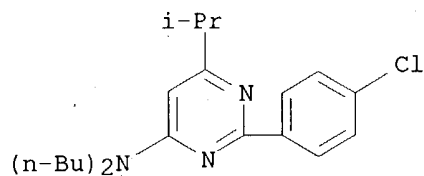
10/122047



● HCl

RN 257948-68-8 CAPLUS

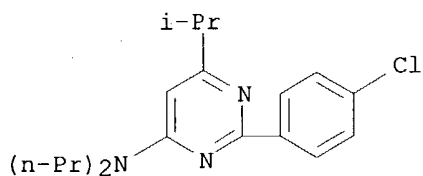
CN 4-Pyrimidinamine, N,N-dibutyl-2-(4-chlorophenyl)-6-(1-methylethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 257948-69-9 CAPLUS

CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-6-(1-methylethyl)-N,N-dipropyl-, monohydrochloride (9CI) (CA INDEX NAME)

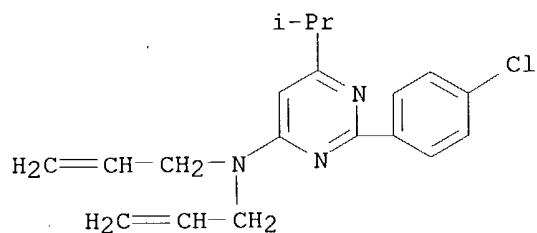


● HCl

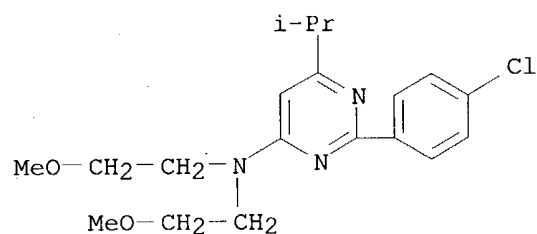
RN 257948-70-2 CAPLUS

CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-6-(1-methylethyl)-N,N-di-2-propenyl-, (9CI) (CA INDEX NAME)

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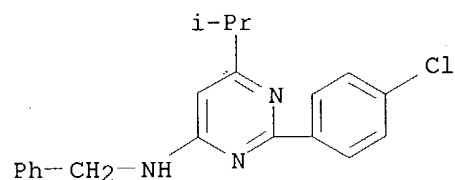


RN 257948-71-3 CAPLUS
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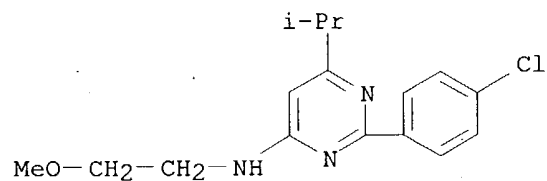


● HCl

RN 257948-73-5 CAPLUS
CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-6-(1-methylethyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 257948-74-6 CAPLUS
CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-N-(2-methoxyethyl)-6-(1-methylethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

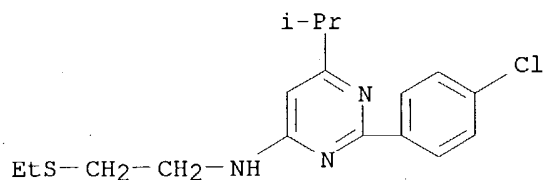


● HCl

RN 257948-75-7 CAPLUS

10/122047

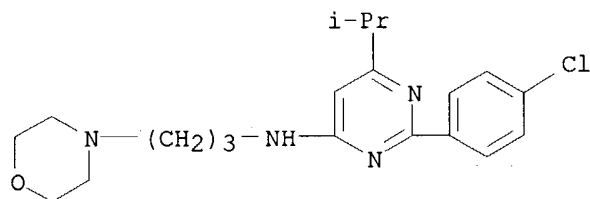
CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-N-[2-(ethylthio)ethyl]-6-(1-methylethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 257948-76-8 CAPLUS

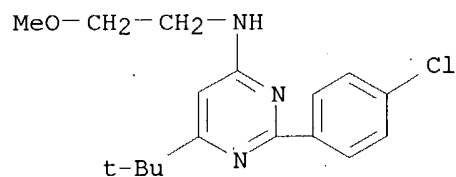
CN 4-Morpholinepropanamine, N-[2-(4-chlorophenyl)-6-(1-methylethyl)-4-pyrimidinyl]-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

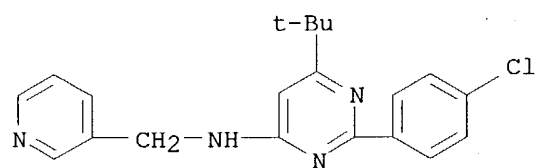
RN 257948-83-7 CAPLUS

CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-6-(1,1-dimethylethyl)-N-(2-methoxyethyl)- (9CI) (CA INDEX NAME)



RN 257948-84-8 CAPLUS

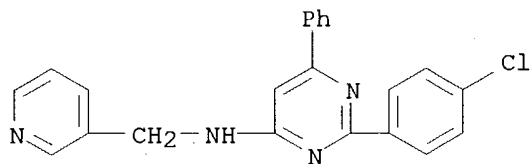
CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-6-(1,1-dimethylethyl)-N-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)



10/122047

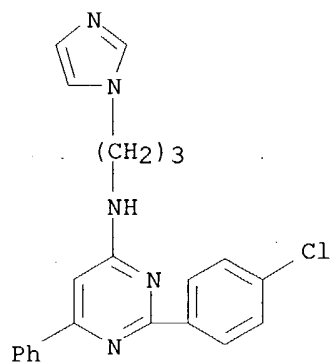
RN 257948-90-6 CAPLUS

CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-6-phenyl-N-(3-pyridinylmethyl)- (9CI)
(CA INDEX NAME)



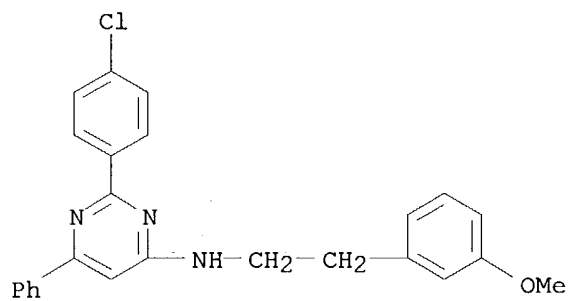
RN 257948-91-7 CAPLUS

CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-N-[3-(1H-imidazol-1-yl)propyl]-6-phenyl- (9CI) (CA INDEX NAME)



RN 257948-92-8 CAPLUS

CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-N-[2-(3-methoxyphenyl)ethyl]-6-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

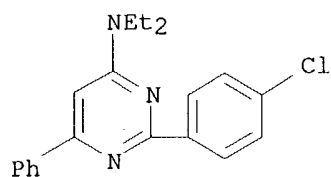


● HCl

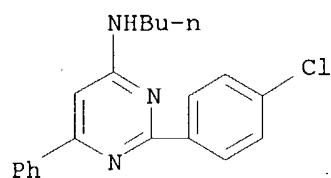
RN 257948-96-2 CAPLUS

CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-N,N-diethyl-6-phenyl- (9CI) (CA INDEX NAME)

10/122047

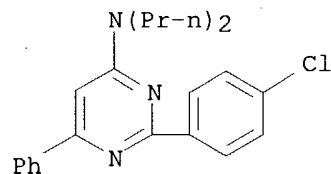


RN 257948-97-3 CAPLUS
CN 4-Pyrimidinamine, N-butyl-2-(4-chlorophenyl)-6-phenyl-, monohydrochloride
(9CI) (CA INDEX NAME)

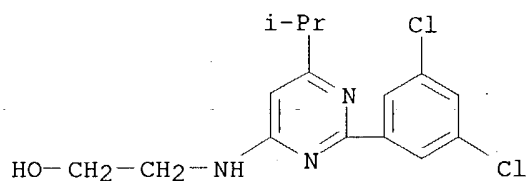


● HCl

RN 257949-01-2 CAPLUS
CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-6-phenyl-N,N-dipropyl-, (9CI) (CA
INDEX NAME)

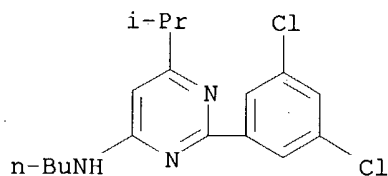


RN 257949-08-9 CAPLUS
CN Ethanol, 2-[[2-(3,5-dichlorophenyl)-6-(1-methylethyl)-4-pyrimidinyl]amino]-
(9CI) (CA INDEX NAME)



RN 257949-09-0 CAPLUS
CN 4-Pyrimidinamine, N-butyl-2-(3,5-dichlorophenyl)-6-(1-methylethyl)-,
monohydrochloride (9CI) (CA INDEX NAME)

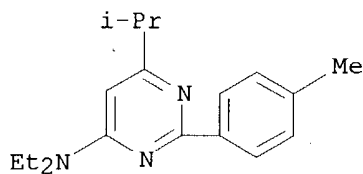
10/122047



● HCl

RN 257949-13-6 CAPLUS

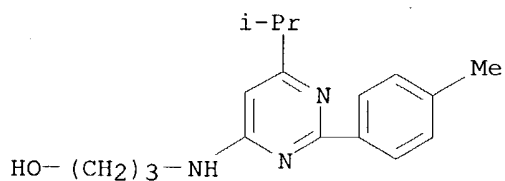
CN 4-Pyrimidinamine, N,N-diethyl-6-(1-methylethyl)-2-(4-methylphenyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

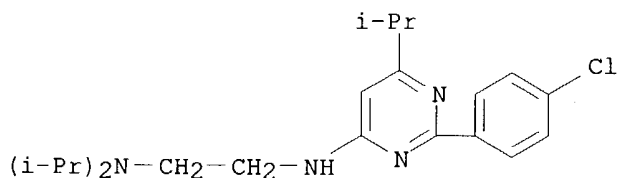
RN 257949-14-7 CAPLUS

CN 1-Propanol, 3-[[6-(1-methylethyl)-2-(4-methylphenyl)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



RN 257949-23-8 CAPLUS

CN 1,2-Ethanediamine, N'-[2-(4-chlorophenyl)-6-(1-methylethyl)-4-pyrimidinyl]-N,N-bis(1-methylethyl)-, dihydrochloride (9CI) (CA INDEX NAME)

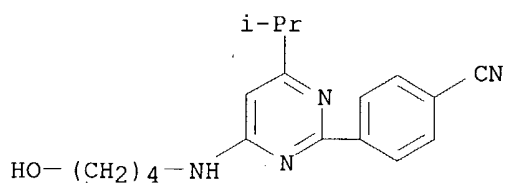


● 2 HCl

RN 257949-30-7 CAPLUS

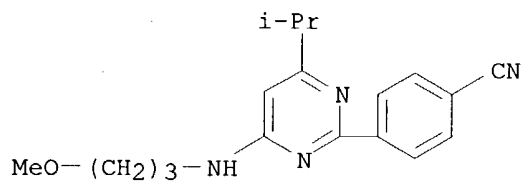
10/122047

CN Benzonitrile, 4-[4-[(4-hydroxybutyl)amino]-6-(1-methylethyl)-2-pyrimidinyl]- (9CI) (CA INDEX NAME)



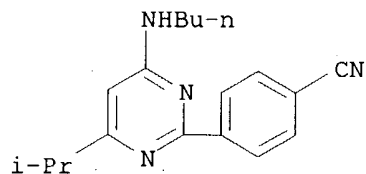
RN 257949-31-8 CAPLUS

CN Benzonitrile, 4-[4-[(3-methoxypropyl)amino]-6-(1-methylethyl)-2-pyrimidinyl]- (9CI) (CA INDEX NAME)



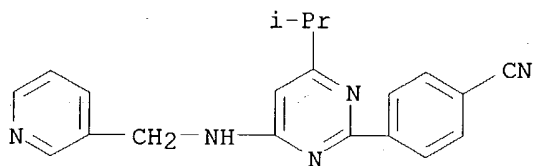
RN 257949-32-9 CAPLUS

CN Benzonitrile, 4-[4-(butylamino)-6-(1-methylethyl)-2-pyrimidinyl]- (9CI) (CA INDEX NAME)



RN 257949-35-2 CAPLUS

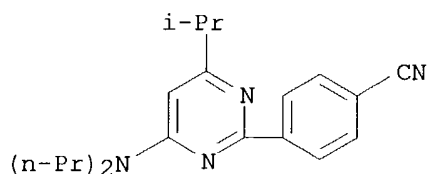
CN Benzonitrile, 4-[4-(1-methylethyl)-6-[(3-pyridinylmethyl)amino]-2-pyrimidinyl]- (9CI) (CA INDEX NAME)



RN 257949-36-3 CAPLUS

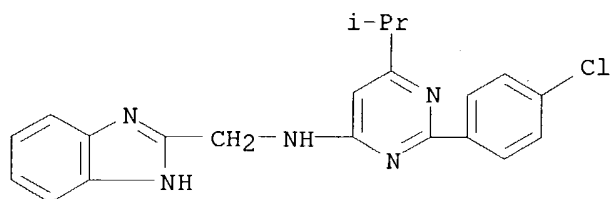
CN Benzonitrile, 4-[4-(dipropylamino)-6-(1-methylethyl)-2-pyrimidinyl]- (9CI) (CA INDEX NAME)

10/122047



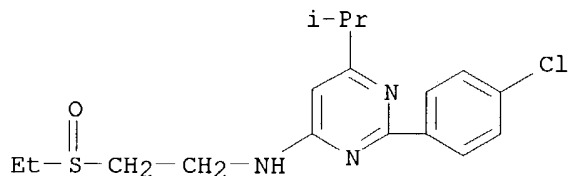
RN 257949-45-4 CAPLUS

CN 1H-Benzimidazole-2-methanamine, N-[2-(4-chlorophenyl)-6-(1-methylethyl)-4-pyrimidinyl]- (9CI) (CA INDEX NAME)



RN 257949-65-8 CAPLUS

CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-N-[2-(ethylsulfinyl)ethyl]-6-(1-methylethyl)- (9CI) (CA INDEX NAME)



IT 257949-69-2 257949-72-7 257949-73-8

257949-74-9 257949-75-0 257949-77-2

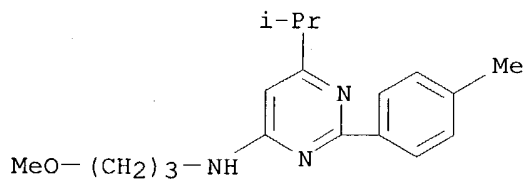
257949-79-4 257949-82-9 257949-86-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of 4-amino-2-arylpyrimidines as modulators of cyclic guanosine monophosphate production)

RN 257949-69-2 CAPLUS

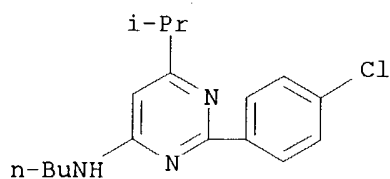
CN 4-Pyrimidinamine, N-(3-methoxypropyl)-6-(1-methylethyl)-2-(4-methylphenyl)- (9CI) (CA INDEX NAME)



RN 257949-72-7 CAPLUS

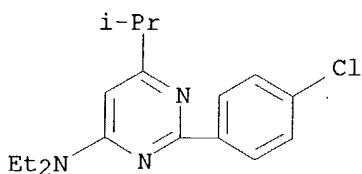
CN 4-Pyrimidinamine, N-butyl-2-(4-chlorophenyl)-6-(1-methylethyl)- (9CI) (CA INDEX NAME)

10/122047



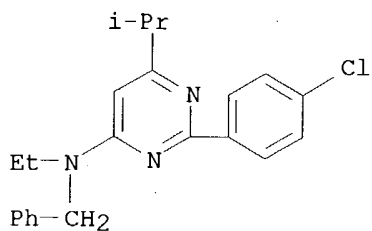
RN 257949-73-8 CAPLUS

CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-N,N-diethyl-6-(1-methylethyl)- (9CI)
(CA INDEX NAME)



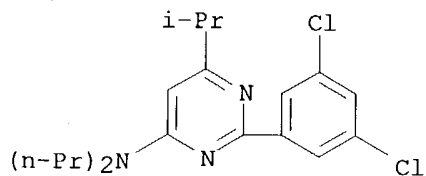
RN 257949-74-9 CAPLUS

CN 4-Pyrimidinamine, 2-(4-chlorophenyl)-N-ethyl-6-(1-methylethyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 257949-75-0 CAPLUS

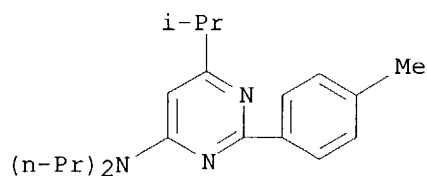
CN 4-Pyrimidinamine, 2-(3,5-dichlorophenyl)-6-(1-methylethyl)-N,N-dipropyl- (9CI) (CA INDEX NAME)



RN 257949-77-2 CAPLUS

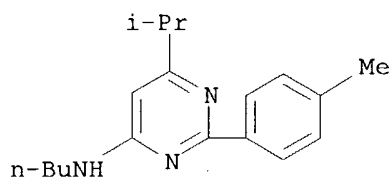
CN 4-Pyrimidinamine, 6-(1-methylethyl)-2-(4-methylphenyl)-N,N-dipropyl- (9CI)
(CA INDEX NAME)

10/122047



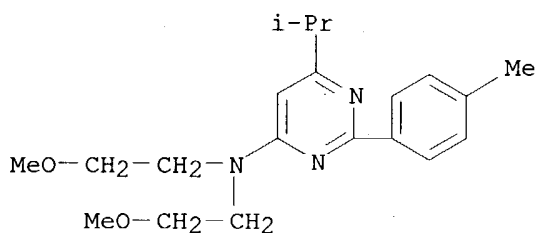
RN 257949-79-4 CAPLUS

CN 4-Pyrimidinamine, N-butyl-6-(1-methylethyl)-2-(4-methylphenyl)- (9CI) (CA INDEX NAME)



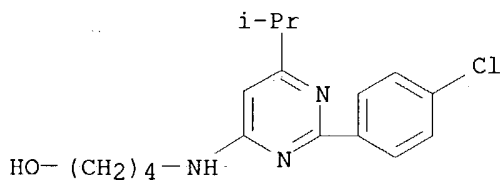
RN 257949-82-9 CAPLUS

CN 4-Pyrimidinamine, N,N-bis(2-methoxyethyl)-6-(1-methylethyl)-2-(4-methylphenyl)- (9CI) (CA INDEX NAME)



RN 257949-86-3 CAPLUS

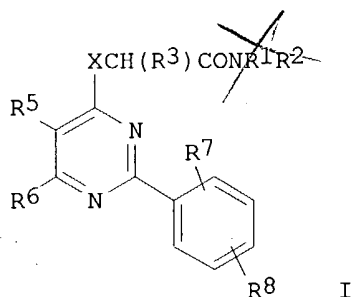
CN 1-Butanol, 4-[[2-(4-chlorophenyl)-6-(1-methylethyl)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)



10/122047

ANSWER 11 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:314282 CAPLUS
DOCUMENT NUMBER: 129:54385
TITLE: Preparation of acetic acid amide derivatives as drugs
INVENTOR(S): Murata, Akiya; Hino, Katsuhiko; Furukawa, Kiyoshi;
Oka, Makoto; Ito, Mari
PATENT ASSIGNEE(S): Dainippon Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 44 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10130150	A2	19980519	JP 1997-257573	19970905
PRIORITY APPLN. INFO.:			JP 1996-257704	19960905
OTHER SOURCE(S):		MARPAT 129:54385		
GI				



data not good

AB The title compds. [I; X = O, NR4; R1 = H, (un)substituted lower alkyl or alkenyl, etc.; R2 = cycloalkyl, lower alkyl, (un)substituted Ph, etc.; R3 = H, alkyl, hydroxyalkyl, etc.; R4 = H, alkyl, or combine with R3 and N to form a pyrrolidine or piperidine; R5 = H, lower alkyl or alkenyl, hydroxyalkyl, CF3, etc.; R6 = H, lower alkyl, CF3, etc.; R7 = H, halo, lower alkyl, etc.; R8 = H, halo, lower alkoxy, etc.] are prepared I, possessing affinity toward the benzodiazepine receptor, are useful for prevention and treatment of melancholia, insecure related diseases, central nervous system diseases, and immunity inflammation diseases. Thus, 4-chloro-5,6-dimethyl-2-phenylpyrimidine was reacted with 2-amino-N,N-dipropylacetamide in the presence of Et3N to give I (R1 = R2 = n-Pr, R3 = R7 = R8 = H, R5 = R6 = Me, X = NH), which showed IC50 of 3.10 nM with abenzodiazepine receptor (BZ ω 3) when tested with rat. A formulation containing I was also prepared

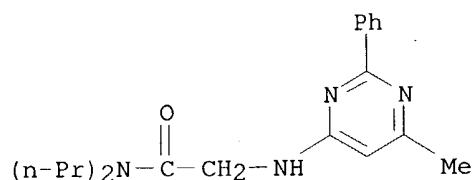
IT 184108-52-9P 184108-53-0P 184108-58-5P
184108-59-6P 184108-61-0P 208468-43-3P
208468-44-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of acetic acid amide derivs. as drugs)

RN 184108-52-9 CAPLUS

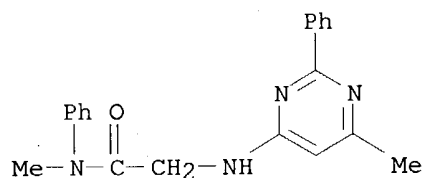
CN Acetamide, 2-[(6-methyl-2-phenyl-4-pyrimidinyl)amino]-N,N-dipropyl- (9CI)
(CA INDEX NAME)

10/122047



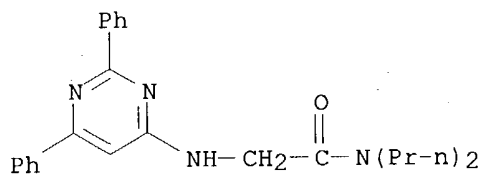
RN 184108-53-0 CAPLUS

CN Acetamide, N-methyl-2-[(6-methyl-2-phenyl-4-pyrimidinyl)amino]-N-phenyl-
(9CI) (CA INDEX NAME)



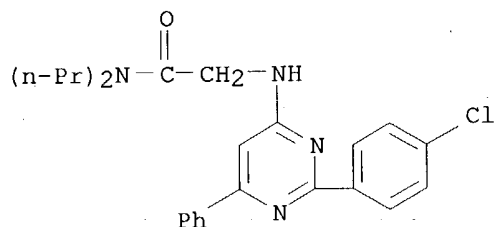
RN 184108-58-5 CAPLUS

CN Acetamide, 2-[(2,6-diphenyl-4-pyrimidinyl)amino]-N,N-dipropyl- (9CI) (CA
INDEX NAME)



RN 184108-59-6 CAPLUS

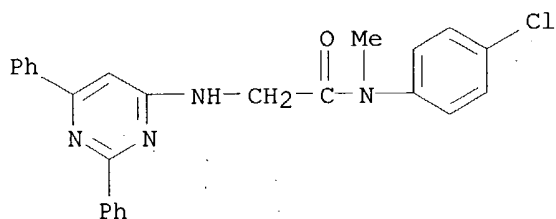
CN Acetamide, 2-[[2-(4-chlorophenyl)-6-phenyl-4-pyrimidinyl]amino]-N,N-
dipropyl- (9CI) (CA INDEX NAME)



RN 184108-61-0 CAPLUS

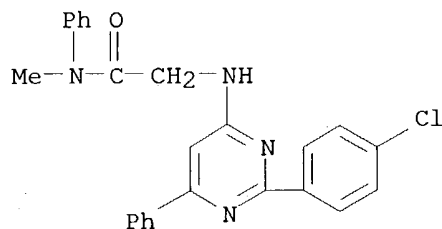
CN Acetamide, N-(4-chlorophenyl)-2-[(2,6-diphenyl-4-pyrimidinyl)amino]-N-
methyl- (9CI) (CA INDEX NAME)

10/122047



RN 208468-43-3 CAPLUS

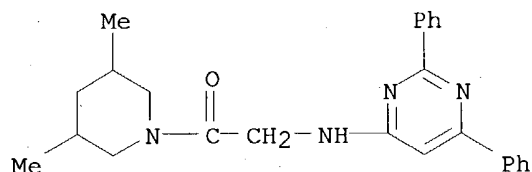
CN Acetamide, 2-[[2-(4-chlorophenyl)-6-phenyl-4-pyrimidinyl]amino]-N-methyl-N-phenyl-, hydrochloride (10:1) (9CI) (CA INDEX NAME)



●1/10 HCl

RN 208468-44-4 CAPLUS

CN Piperidine, 1-[[2-(4-chlorophenyl)-6-phenyl-4-pyrimidinyl]amino]acetyl]-3,5-dimethyl-, hydrochloride (10:1) (9CI) (CA INDEX NAME)



L4 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:753799 CAPLUS

DOCUMENT NUMBER: 126:18884

TITLE: Preparation and formulation of pyrimidine derivatives as agents with effect on the peripheral benzodiazepine receptors

INVENTOR(S): Murata, Teruya; Hino, Katsuhiko; Furukawa, Kiyoshi; Oka, Makoto; Itoh, Mari

PATENT ASSIGNEE(S): Dainippon Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 110 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

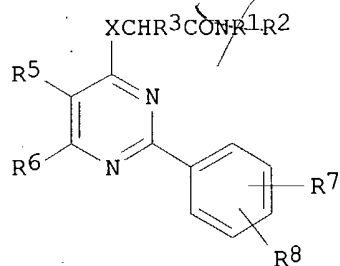
PATENT NO.

KIND DATE

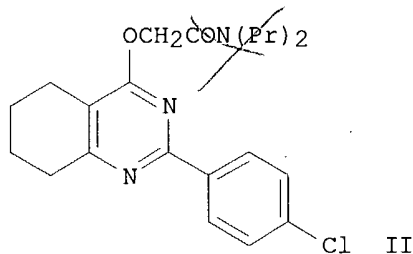
APPLICATION NO. DATE

WO 9632383	A1	19961017	WO 1996-JP977	19960410
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML				
IL 117659	A1	20001206	IL 1996-117659	19960326
ZA 9602438	A	19961001	ZA 1996-2438	19960327
CA 2218033	AA	19961017	CA 1996-2218033	19960410
AU 9652874	A1	19961030	AU 1996-52874	19960410
AU 694647	B2	19980723		
EP 826673	A1	19980304	EP 1996-909327	19960410
EP 826673	B1	20021120		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI				
CN 1186487	A	19980701	CN 1996-194408	19960410
CN 1094929	B	20021127		
BR 9604894	A	19980714	BR 1996-4894	19960410
RU 2160256	C2	20001210	RU 1997-118591	19960410
SK 281840	B6	20010806	SK 1997-1374	19960410
CZ 289093	B6	20011017	CZ 1997-3223	19960410
RO 117532	B1	20020430	RO 1997-1858	19960410
AT 228113	E	20021215	AT 1996-909327	19960410
PT 826673	T	20030228	PT 1996-96909327	19960410
ES 2187644	T3	20030616	ES 1996-909327	19960410
TW 450963	B	20010821	TW 1996-85104372	19960412
NO 9704685	A	19971212	NO 1997-4685	19971010
US 5972946	A	19991026	US 1997-930604	19971014

PRIORITY APPLN. INFO.:

JP 1995-113937 A 19950413
WO 1996-JP977 W 19960410OTHER SOURCE(S): MARPAT 126:18884
GI

I



II

AB The title compds. I [X represents O or NR₄; R₁ represents H, lower alkyl, lower alkenyl or cycloalkyl(lower)alkyl; R₂ represents lower alkyl, cycloalkyl, optionally substituted Ph, etc.; R₃ represents H, lower alkyl or hydroxy(lower)alkyl; R₄ represents H, lower alkyl, etc.; R₅ represents hydroxy(lower)alkyl, etc.; R₆ represents H, lower alkyl, CF₃ or optionally substituted Ph, or R₅ and R₆ together form (CH₂)_n; n = 3 - 6; R₇ represents H, halogeno, lower alkyl, lower alkoxy, CF₃, OH, NH₂, etc.; and R₈ represents H, halogeno, lower alkyl or lower alkoxy] are prepared In an in vitro test for affinity for the peripheral benzodiazepine receptors, the title compound II in vitro showed IC₅₀ of 0.89 nM.

IT 184108-52-9P 184108-53-0P 184108-58-5P
184108-59-6P 184108-60-9P 184108-61-0P

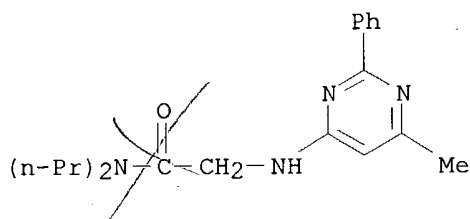
10/122047

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrimidine derivs. as agents with effect on peripheral benzodiazepine receptors)

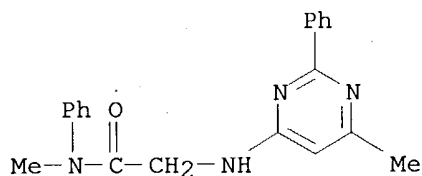
RN 184108-52-9 CAPLUS

CN Acetamide, 2-[(6-methyl-2-phenyl-4-pyrimidinyl)amino]-N,N-dipropyl- (9CI)
(CA INDEX NAME)



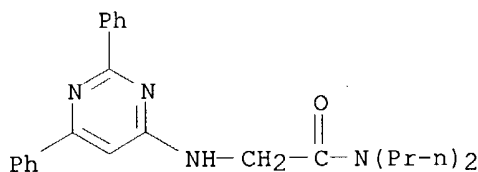
RN 184108-53-0 CAPLUS

CN Acetamide, N-methyl-2-[(6-methyl-2-phenyl-4-pyrimidinyl)amino]-N-phenyl- (9CI)
(CA INDEX NAME)



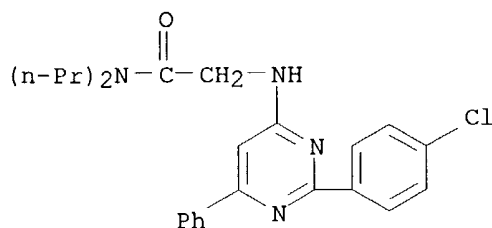
RN 184108-58-5 CAPLUS

CN Acetamide, 2-[(2,6-diphenyl-4-pyrimidinyl)amino]-N,N-dipropyl- (9CI)
(CA INDEX NAME)



RN 184108-59-6 CAPLUS

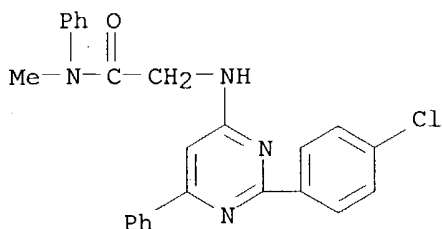
CN Acetamide, 2-[[2-(4-chlorophenyl)-6-phenyl-4-pyrimidinyl]amino]-N,N-dipropyl- (9CI)
(CA INDEX NAME)



RN 184108-60-9 CAPLUS

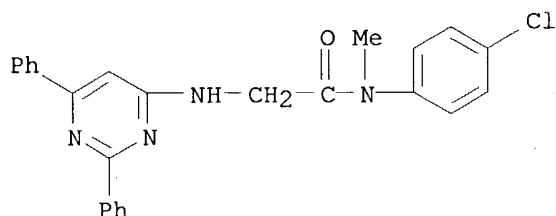
10/122047

CN Acetamide, 2-[[2-(4-chlorophenyl)-6-phenyl-4-pyrimidinyl]amino]-N-methyl-N-phenyl- (9CI) (CA INDEX NAME)



RN 184108-61-0 CAPLUS

CN Acetamide, N-(4-chlorophenyl)-2-[(2,6-diphenyl-4-pyrimidinyl)amino]-N-methyl- (9CI) (CA INDEX NAME)



L4 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:457586 CAPLUS

DOCUMENT NUMBER: 125:221520

TITLE: 2-Aza-1,3-dienes with electron-releasing substituents at the 1,3-positions. Reagents for the construction of pyridine and pyrimidine derivatives

AUTHOR(S): Morel, Georges; Marchand, Evelyne; Pradere, Jean-Paul; Toupet, Loic; Sinbandhit, Sourisak

CORPORATE SOURCE: Lab. de Physicochimie Structurale, URA CNRS, Rennes, 35042, Fr.

SOURCE: Tetrahedron (1996), 52(30), 10095-10112

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 125:221520

AB New 2-aza-1,3-dienes bearing 1- and 3-donor substituents are prepared from N-thioacylacetamidines through deprotonation of N-ylidene acetamidinium iodides. The 2-aza-3-(dimethylamino)-1-(methylthio)-1-phenylbutadiene is trapped in situ by the residual precursor salt acting as a heterodienophile to give 4-(dimethylamino)-2,6-diphenylpyrimidine. Substituted 2-aza-1-(dimethylamino)-3-(methylthio) analogs react readily with a variety of electron-deficient dienophiles to yield pyridine or pyrimidine derivs. The stereochem. of the hetero Diels-Alder reaction in the cases of di-Me fumarate and acrylonitrile has been assigned by X-ray diffraction analyses of the resulting tetrahydropyridines and corresponds to an exo selectivity. The number and nature of cycloadducts in the cases of di-Me acetylenedicarboxylate and Ph isothiocyanate depend on C-4 substitution. The results obtained from the C-4 unsubstituted azabutadiene $\text{CH}_2:\text{C}(\text{SMe})\text{N}:\text{CMeNMe}_2$ are explained by an allylic rearrangement

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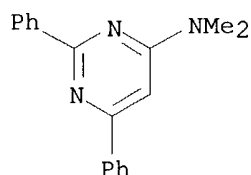
involving the 1,3-migration of dimethylamino group in the primary [4 + 2] adduct.

IT 41270-89-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of pyridine and pyrimidine derivs. from aza dienes)

RN 41270-89-7 CAPLUS

CN 4-Pyrimidinamine, N,N-dimethyl-2,6-diphenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1992:511635 CAPLUS

DOCUMENT NUMBER: 117:111635

TITLE: Preparation and formulation of pyrimidine derivatives
as brain function improvers

INVENTOR(S): Chokai, Shoichi; Aoki, Tomiyoshi; Kimura, Kiyoshi

PATENT ASSIGNEE(S): Nippon Shinyaku Co., Ltd., Japan

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

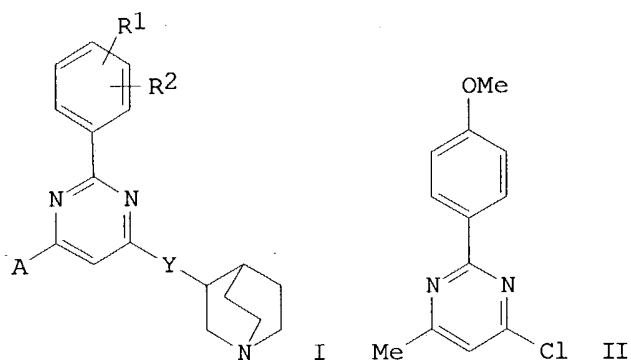
PATENT INFORMATION:

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WO 9204333	A1	19920319	WO 1991-JP1152	19910829
W: AU, BR, CA, FI, HU, JP, KR, NO, SU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
CA 2090027	AA	19920301	CA 1991-2090027	19910829
AU 9184059	A1	19920330	AU 1991-84059	19910829
EP 555478	A1	19930818	EP 1991-915722	19910829
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
CN 1059908	A	19920401	CN 1991-108523	19910831
US 5589477	A	19961231	US 1993-983515	19930226
PRIORITY APPLN. INFO.:			JP 1990-231029	19900831
			JP 1991-155628	19910529
			WO 1991-JP1152	19910829

OTHER SOURCE(S): MARPAT 117:111635

GI

10/122047



AB Pyrimidine derivs. [I; R1, R2 = H, OH, alkoxy, CF3, halo; A = Me, CF3, Me3C; Y = O, NH], useful as muscarinic agonists in treating central nervous disorders such as dementia, are prepared NaH (60%) was added to a solution of 15.0 g chloro compound II and 8.13 g 3-quinuclidinol in DMF with stirring under cooling and at room temperature; H2O was added, and the oily material was extracted with EtOAc to give 16.9 g oil, which was treated with maleic acid in MeOH to give 16.4 g I.maleate (R1 = H, R2 = 4-MeO, A = Me, Y = O) (III). III showed (1.4-9.9) + 102 times greater binding affinity for muscarinic receptor than carbachol. Also prepared and tested were 63 addnl. I. Injection, pellet, and suppository formulations were given.

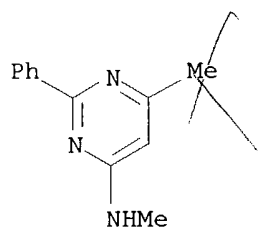
IT 142220-99-3P 142221-00-9P 142221-01-0P

142221-02-1P 142221-04-3P 142245-43-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as brain function improver)

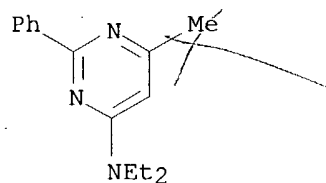
RN 142220-99-3 CAPLUS

CN 4-Pyrimidinamine, N,6-dimethyl-2-phenyl- (9CI) (CA INDEX NAME)



RN 142221-00-9 CAPLUS

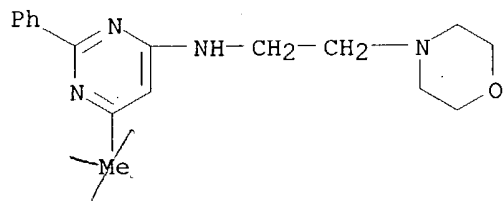
CN 4-Pyrimidinamine, N,N-diethyl-6-methyl-2-phenyl-, monohydrochloride (9CI)
(CA INDEX NAME)



● HCl

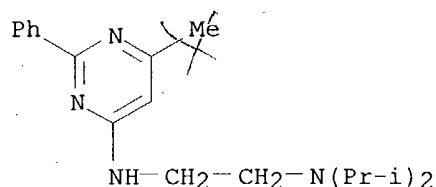
10/122047

RN 142221-01-0 CAPLUS
CN 4-Morpholineethanamine, N-(6-methyl-2-phenyl-4-pyrimidinyl)-,
dihydrochloride (9CI) (CA INDEX NAME)



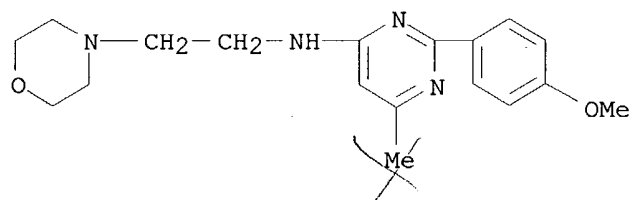
● 2 HCl

RN 142221-02-1 CAPLUS
CN 1,2-Ethanediamine, N,N-bis(1-methylethyl)-N'-(6-methyl-2-phenyl-4-pyrimidinyl)-, dihydrochloride (9CI) (CA INDEX NAME)

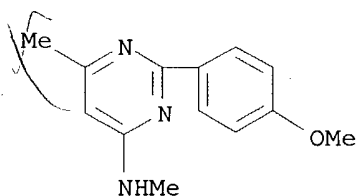


● 2 HCl

RN 142221-04-3 CAPLUS
CN 4-Morpholineethanamine, N-[2-(4-methoxyphenyl)-6-methyl-4-pyrimidinyl]-
(9CI) (CA INDEX NAME)



RN 142245-43-0 CAPLUS
CN 4-Pyrimidinamine, 2-(4-methoxyphenyl)-N,6-dimethyl- (9CI) (CA INDEX NAME)



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L4 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1992:194345 CAPLUS

DOCUMENT NUMBER: 116:194345

TITLE: Pyrimidyl-substituted acrylic acid esters

INVENTOR(S): Klausener, Alexander; Knueppel, Peter C.; Dehne, Heinz
Wilhelm; Dutzmann, Stefan

PATENT ASSIGNEE(S): Bayer A.-G., Germany

SOURCE: Eur. Pat. Appl., 65 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

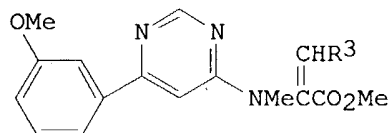
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 471261	A1	19920219	EP 1991-113091	19910803
EP 471261	B1	19960117		
R: BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL				
DE 4025891	A1	19920220	DE 1990-4025891	19900816
US 5231097	A	19930727	US 1991-739647	19910802
ES 2082057	T3	19960316	ES 1991-113091	19910803
BR 9103495	A	19920512	BR 1991-3495	19910805
JP 04244068	A2	19920901	JP 1991-223648	19910809
ZA 9106449	A	19920527	ZA 1991-6449	19910815
			DE 1990-4025891	19900816

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 116:194345

GI



AB PyXC(:CHR)CO2R1 (Py = pyrimidinyl; R = dialkylamino, alkoxy, aralkoxy; R1 = alkyl; X = O, S, NR2; R2 = H, alkyl, aralkyl, aryl) were prepared for use as fungicides. Thus, 4-chloro-6-(3-methoxyphenyl)pyrimidine was treated with MeNHCH2CO2Me.HCl followed by Me3COCH(NMe2)2 to give the pyrimidine I (R3 = NMe2), which was hydrolyzed with aqueous HCl and treated with Me2SO4 to give I (R3 = OMe). The latter compound was more active against Phytophthora on tomatoes than standard compds.

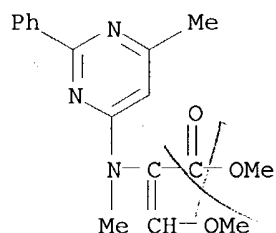
IT **140117-88-0P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 140117-88-0 CAPLUS

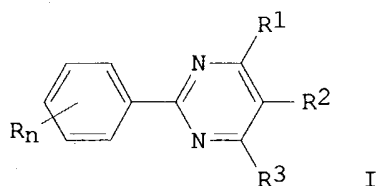
CN 2-Propenoic acid, 3-methoxy-2-[methyl(6-methyl-2-phenyl-4-pyrimidinyl)amino]-, methyl ester (9CI) (CA INDEX NAME)

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L4 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1986:47176 CAPLUS
DOCUMENT NUMBER: 104:47176
TITLE: Use of phenylpyrimidines as plant growth regulators
INVENTOR(S): Seiler, Alfred; Mueller, Urs
PATENT ASSIGNEE(S): Ciba-Geigy A.-G. , Ger. Dem. Rep.
SOURCE: Eur. Pat. Appl., 57 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 136976	A2	19850410	EP 1984-810408	19840820
EP 136976	A3	19850515		
R: BE, CH, DE, FR, GB, IT, LI, NL				
JP 60072808	A2	19850424	JP 1984-175823	19840823
PRIORITY APPLN. INFO.: GI			CH 1983-4614	19830823



AB The phenylpyrimidines I (R = H, halo, NO₂, CN, OH, alkyl, etc.; R1 and R2 = H, halo, alkyl, alkoxyalkyl, etc.; R3 = H, halo, alkyl, haloalkyl, or Ph) are plant growth regulators. Thus, 2-phenyl-4,6-dichloropyrimidine [3740-92-9] (500 mg/kg), applied as a seed dressing, increased the length and weight of wheat roots. The synthesis of I is given.

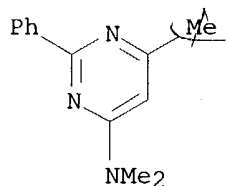
IT **83216-92-6P 83216-93-7P**

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as plant-growth regulator)

RN 83216-92-6 CAPLUS

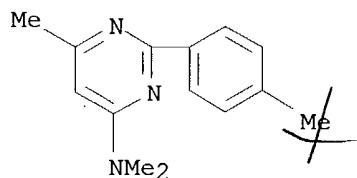
CN 4-Pyrimidinamine, N,N,6-trimethyl-2-phenyl- (9CI) (CA INDEX NAME)

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RN 83216-93-7 CAPLUS

CN 4-Pyrimidinamine, N,N,6-trimethyl-2-(4-methylphenyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1985:162193 CAPLUS

DOCUMENT NUMBER: 102:162193

TITLE: Phenylpyrimidines as antidotes for protecting cultivated plants against phytotoxic damage caused by herbicides

INVENTOR(S): Burdeska, Kurt; Kabas, Guglielmo; Brunner, Hans Georg; Foery, Werner

PATENT ASSIGNEE(S): Ciba-Geigy Corp., USA

SOURCE: U.S., 29 pp. Cont.-in-part of U.S. Ser. No. 331,853, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

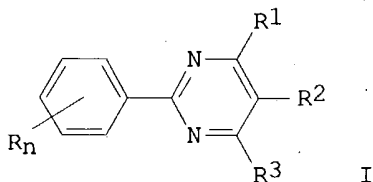
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4493726	A	19850115	US 1983-486651	19830420
ZA 8108852	A	19821229	ZA 1981-8852	19811222
US 4674229	A	19870623	US 1984-667705	19841102
PRIORITY APPLN. INFO.:			CH 1980-9522	19801223
			CH 1981-2363	19810408
			US 1981-331853	19811217
			US 1983-486651	19830420

GI



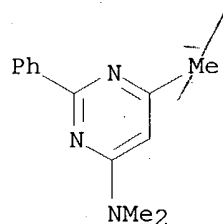
AB The phenylpyrimidines I (R = H, halo, CN, NO₂, OH, C1-6 alkyl, alkoxy or alkylthio, etc.; R1 and R2 = halo, CN, OH, SH, C1-6 alkyl, etc.; R2 = H, halo, C1-6 alkyl, haloalkyl, or Ph; n = 1-5) are herbicide antidotes. The pertinent herbicides are butachlor [23184-66-9], alachlor [15972-60-8], acetochlor [34256-82-1], trifluralin [1582-09-8], and many others. Thus, in pot expts., 2-(p-chlorophenyl)-4,6-dichloropyrimidine [26870-72-4], applied together with pretilachlor [51218-49-6], at 0.25 kg/ha each, protected rice against the phytotoxicity of the latter.

IT **83216-92-6P 83216-93-7P**

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as herbicide antidote)

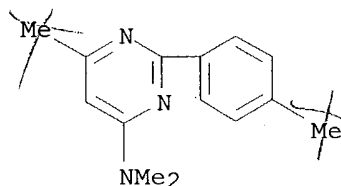
RN 83216-92-6 CAPLUS

CN 4-Pyrimidinamine, N,N,6-trimethyl-2-phenyl- (9CI) (CA INDEX NAME)



RN 83216-93-7 CAPLUS

CN 4-Pyrimidinamine, N,N,6-trimethyl-2-(4-methylphenyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1984:209733 CAPLUS

DOCUMENT NUMBER: 100:209733

TITLE: Heterocyclic amplifiers of phleomycin. I. Some pyrimidinylpurines, pyrimidinylpteridines and phenylpyrimidines

AUTHOR(S): Brown, Desmond J.; Cowden, William B.; Lan, Shu Bin; Mori, Kenya

CORPORATE SOURCE: John Curtin Sch. Med. Res., Aust. Natl. Univ., Canberra, 2601, Australia

SOURCE: Australian Journal of Chemistry (1984), 37(1), 155-63
CODEN: AJCHAS; ISSN: 0004-9425

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Synthetic routes are described to 5,6-diamino-2,4'-bipyrimidin-4-ones and thence to 2-(pyrimidin-4-yl)purines and 2-(pyrimidin-4-yl)pteridines, some of which bear an S or N-linked basic side chain; also reported are routes to a series of phenyl- and diphenylpyrimidines, with similar S-, N-, or O-linked side chains. Members of all the above systems show activity as amplifiers of phleomycin in a bacterial screen but the phenylpyrimidines

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with a sulfur-linked side chain are especially active.

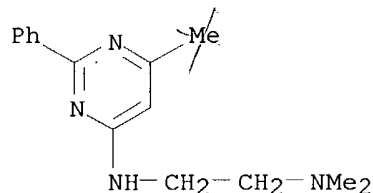
IT 90185-70-9P 90185-72-1P 90185-84-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and phleomycin amplifying activity of)

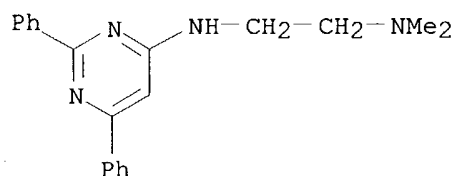
RN 90185-70-9 CAPLUS

CN 1,2-Ethanediamine, N,N-dimethyl-N'-(6-methyl-2-phenyl-4-pyrimidinyl)-
(9CI) (CA INDEX NAME)



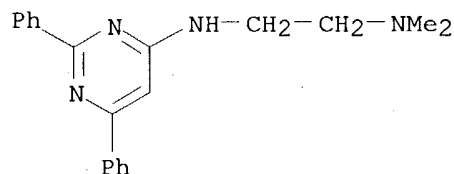
RN 90185-72-1 CAPLUS

CN 1,2-Ethanediamine, N'-(2,6-diphenyl-4-pyrimidinyl)-N,N-dimethyl- (9CI)
(CA INDEX NAME)



RN 90185-84-5 CAPLUS

CN 1,2-Ethanediamine, N'-(2,6-diphenyl-4-pyrimidinyl)-N,N-dimethyl-,
dihydrobromide (9CI) (CA INDEX NAME)



● 2 HBr

L4 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1982:558036 CAPLUS

DOCUMENT NUMBER: 97:158036

TITLE: Use of phenylpyrimidines as protecting agents for crop
plants against phytotoxic damage caused by herbicides
INVENTOR(S): Burdeska, Kurt; Kabas, Guglielmo; Brunner, Hans Georg;
Foery, Werner

PATENT ASSIGNEE(S): Ciba-Geigy A.-G. , Switz.

SOURCE: Eur. Pat. Appl., 98 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

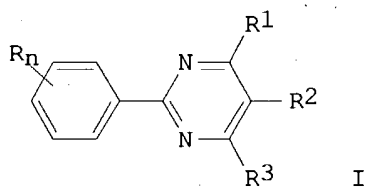
10/122047

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 55693	A1	19820707	EP 1981-810505	19811217
EP 55693	B1	19880120		
R: AT, BE, CH, DE, FR, GB, IT, NL				
IN 159209	A	19870411	IN 1981-DE784	19811215
AT 32065	E	19880215	AT 1981-810505	19811217
CA 1220953	A1	19870428	CA 1981-392824	19811221
IL 64612	A1	19880930	IL 1981-64612	19811221
DK 8105712	A	19820624	DK 1981-5712	19811222
DK 156687	B	19890925		
DK 156687	C	19900312		
ES 508254	A1	19821101	ES 1981-508254	19811222
ZA 8108852	A	19821229	ZA 1981-8852	19811222
DD 202798	A5	19831005	DD 1981-236096	19811222
HU 27801	O	19831128	HU 1981-3912	19811222
HU 191339	B	19870227		
CS 243465	B2	19860612	CS 1981-9672	19811222
SU 1482505	A3	19890523	SU 1981-3369450	19811222
AU 8178840	A1	19820701	AU 1981-78840	19811223
AU 558710	B2	19870205		
JP 57131702	A2	19820814	JP 1981-208971	19811223
JP 62025641	B4	19870604		
BR 8108383	A	19821013	BR 1981-8383	19811223
RO 83451	P	19840221	RO 1981-106092	19811223
PL 130575	B1	19840831	PL 1981-234418	19811223
JP 61246102	A2	19861101	JP 1986-68237	19860326
JP 02053402	B4	19901116		
PRIORITY APPLN. INFO.:			CH 1980-9522	19801223
			CH 1981-2363	19810408
			EP 1981-810505	19811217

GI



AB The phenylpyrimidines I (R = H, alkyl, halo, NO₂, CF₃, etc.; R₁ = H, halo, SOME, OMe, etc.; R₂ = H, Me, Ph, NMe, OEt, etc.; R₃ = H, halo, OEt, NHMe, SEt, etc.; n = 1-5) are herbicide antidotes. Thus, post-transplant application of 2-phenyl-4-chloropyrimidine [3740-92-9] (1 kg/ha) protected rice against the phytotoxic activity of pretilachlor [51218-49-6] (1 kg/ha) by 50%. The synthesis of I is given.

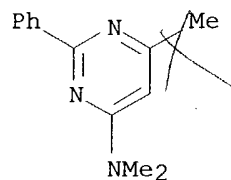
IT **83216-92-6P 83216-93-7P**

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and herbicide-antidote activity of)

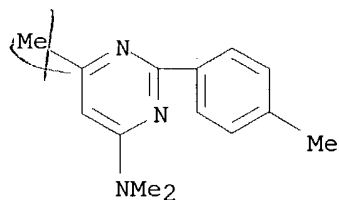
RN 83216-92-6 CAPLUS

CN 4-Pyrimidinamine, N,N,6-trimethyl-2-phenyl- (9CI) (CA INDEX NAME)

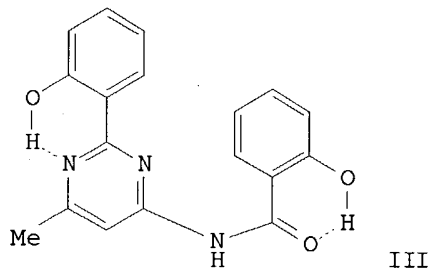
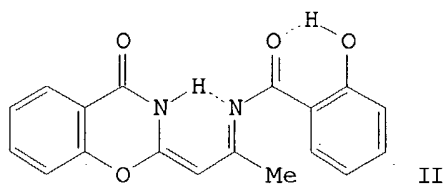
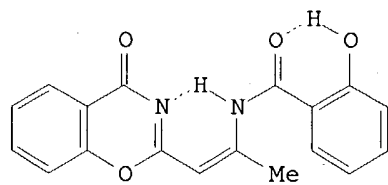
10/122047



RN 83216-93-7 CAPLUS
CN 4-Pyrimidinamine, N,N,6-trimethyl-2-(4-methylphenyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1981:208784 CAPLUS
DOCUMENT NUMBER: 94:208784
TITLE: Structure of anhydroacetylsalicylamide
AUTHOR(S): Kemp, D. S.; Vellaccio, Frank; Gilman, Neal
CORPORATE SOURCE: Dep. Chem., Massachusetts Inst. Technol., Cambridge, MA, 02139, USA
SOURCE: Journal of Organic Chemistry (1981), 46(9), 1804-7
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 94:208784
GI



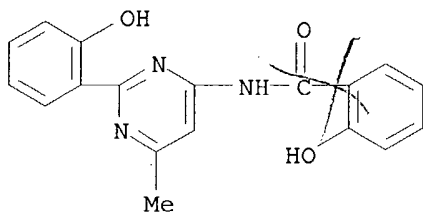
10/122047

AB Anhydroacetylsalicylamide, previously reported as 2-methyl-4H-1,3-benzoxazin-4-one, was shown by chemical and spectroscopic anal. to be the benzoxazinone I or its simple tautomer II. The product of the reaction of this substance with NH₃ is III.

IT **3605-06-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)

RN 3605-06-9 CAPLUS

CN Benzamide, 2-hydroxy-N-[2-(2-hydroxyphenyl)-6-methyl-4-pyrimidinyl]- (9CI)
(CA INDEX NAME)



L4 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1973:159545 CAPLUS

DOCUMENT NUMBER: 78:159545

TITLE: Pyrimidines from this laboratory. XXXI. ANRORC [addition nucleophile ring opening ring closing] mechanism. V. Occurrence of the ANRORC [addition nucleophile ring opening ring closing] mechanism in aminations of substituted haloaza-aromatics with potassium amide in liquid ammonia

AUTHOR(S): De Valk, J.; Van der Plas, H. C.; De Bode, J. W. A.

CORPORATE SOURCE: Lab. Org. Chem., Agric. Univ., Wageningen, Neth.

SOURCE: Recueil des Travaux Chimiques des Pays-Bas (1973), 92(3), 442-8
CODEN: RTCPA3; ISSN: 0165-0513

DOCUMENT TYPE: Journal

LANGUAGE: English

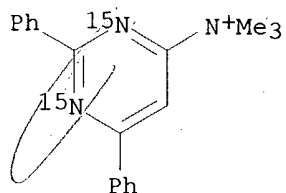
AB Evidence is presented that the amination of 4-chloro-2,6-diphenylpyrimidine with KNH₂ in liquid ammonia into the corresponding 4-amino compound occurs to the extent of about 45% by the ANRORC mechanism. In the amination of the 4-iodo- and 4-fluoro derivs. of 2,6-diphenylpyrimidine however, the ANRORC mechanism is not operative at all. The amination of 5-bromo-4-chloro-2,6-diphenylpyrimidine into 4-amino-5-bromo-2,6-diphenylpyrimidine occurs to the extent of about 18% by the ANRORC mechanism. The synthesis of 5-bromo-4-chloro-2,6-diphenylpyrimidine-1(3)-15N and of the 4-fluoro, 4-chloro and 4-iodo derivs. of 2,6-diphenylpyrimidine-1(3)-15N is described.

IT **41270-86-4P 41270-88-6P 41270-89-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 41270-86-4 CAPLUS

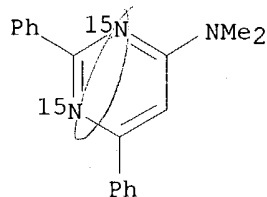
CN 4-Pyrimidinaminium-1,3-15N₂, N,N,N-trimethyl-2,6-diphenyl-, chloride (9CI)
(CA INDEX NAME)

10/122047

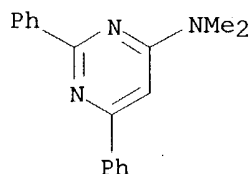


● Cl⁻

RN 41270-88-6 CAPLUS
CN 4-Pyrimidinamine-1,3-15N2, N,N-dimethyl-2,6-diphenyl- (9CI) (CA INDEX NAME)



RN 41270-89-7 CAPLUS
CN 4-Pyrimidinamine, N,N-dimethyl-2,6-diphenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1965:480703 CAPLUS
DOCUMENT NUMBER: 63:80703
ORIGINAL REFERENCE NO.: 63:14880d-e
TITLE: Pyrimidine derivatives
INVENTOR(S): Hanada, Takemi
PATENT ASSIGNEE(S): Institute of Physical and Chemical Research
SOURCE: 3 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 40015197		19650716	JP	19630128
AB	4-Methyl-2-(2-hydroxyphenyl)-6-(2-hydroxybenzoylimino)-6H-1,3-oxazine (2 g.) is refluxed in a mixture of 60 cc. EtOH and 60 cc. 3N NH4OH to give 1.7 g. 4-methyl-2-(2'-hydroxyphenyl)-6-(2-hydroxybenzoylamino)pyrimidine (I), m. 227° (C6H6), O-monoacetate m. 167-8°. I (1 g.) is				

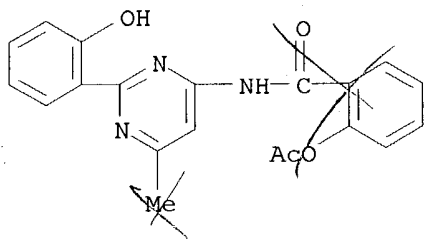
10/122047

refluxed for 1 hr. in 50 cc. 1N NaOH and dilute HCl added to give 0.6 g.
4-methyl-6-amino-2-(2-hydroxyphenyl)pyrimidine, plates, m. 156-7°
(C₆H₆), useful intermediate for the manufacture of sulfa drugs.

IT **3605-05-8**, Salicylamide, N-[2-(o-hydroxyphenyl)-6-methyl-4-pyrimidinyl]-, acetate (ester) **3605-06-9**, Salicylamide, N-[2-(o-hydroxyphenyl)-6-methyl-4-pyrimidinyl]-
(preparation of)

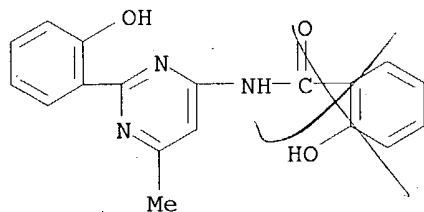
RN 3605-05-8 CAPLUS

CN Salicylamide, N-[2-(o-hydroxyphenyl)-6-methyl-4-pyrimidinyl]-, acetate (ester) (8CI) (CA INDEX NAME)



RN 3605-06-9 CAPLUS

CN Benzamide, 2-hydroxy-N-[2-(2-hydroxyphenyl)-6-methyl-4-pyrimidinyl]- (9CI)
(CA INDEX NAME)



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